

Getting back on track

Delivering a smokefree
start for every child



A report by Action on Smoking and Health (ASH)
and the Smoking in Pregnancy Challenge Group.
February 2021.

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Foreword

From the Royal College of Midwives (RCM) and the Royal College of Obstetricians and Gynaecologists (RCOG)

Smoking and exposure to secondhand smoke during pregnancy is responsible for an increased rate of stillbirths, miscarriages and birth defects. In recent years, the NHS has prioritised reducing smoking in pregnancy as part of its maternity safety agenda. This is welcome action but is yet to result in major declines to national rates of smoking in pregnancy, which have flatlined at just under 11% since 2015. This leaves only two years in which to achieve the 6% ambition set out in the Government's 2017 Tobacco Control Plan for England.

Although encouraging progress has been made in reducing stillbirth rates over the last decade, neonatal mortality rates have flatlined since 2010, with 1,742 neonatal deaths in 2018. Without reducing levels of smoking in pregnancy, the Government's ambition to halve stillbirth and neonatal mortality rates by 2025 will be much harder to realise, leading to tragic outcomes for many families.

Despite these challenges, many local areas are progressing further and faster than the country as a whole, with some localities having driven down smoking in pregnancy rates almost three times faster than the England average. These areas should serve as an example of what is possible across the country.

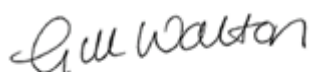
As leading organisations representing maternity professionals, the RCM and the RCOG have long been concerned with the impact that smoking during pregnancy and beyond has on the health of mothers, children, and families. This issue disproportionately impacts the poorest and most vulnerable families in our society and must be tackled to break the cycle of inequality afflicting so many communities.

Evidence shows that COVID-19 has compounded these inequalities, placing an additional burden on poorer communities with high rates of infant mortality, partly attributable to high rates of smoking. Tackling smoking in the most deprived areas is vital for delivering an equitable recovery from the pandemic, building population health resilience, and driving down infant mortality.

This report sets out the action needed to turn the Government's ambitions on smoking in pregnancy and a smokefree society into a reality.



Dr Edward Morris, President of the Royal College of Obstetricians and Gynaecologists



Gill Walton, Chief Executive of the Royal College of Midwives

Recommendations

Note on the future of Public Health England: In Autumn 2020, the Government announced that Public Health England would be decommissioned, and its health improvement functions transferred to future host organisations by Spring 2021. At the time of publication, PHE is still operational and it is not clear which organisation/s will take on PHE's health improvement responsibilities, specifically regarding smoking in pregnancy. Consequently, PHE is referenced in the recommendations and throughout the report. The recommendations will be updated once the Government sets out where PHE's health improvement responsibilities will sit in future.

Achieving the smokefree 2030 ambition

- » The Government should implement the recommendations set out in the [Roadmap to a Smokefree 2030](#), including introducing a Smokefree 2030 Fund to provide sustainable funding for tobacco control, to drive down smoking rates among populations vulnerable to smoking during pregnancy.
- » The Government's 2021 Tobacco Control Plan should set a target for reducing Smoking at the Time of Delivery (SATOD) to 4% by 2026, putting England on track to deliver a smokefree start for every child by 2030. In addition, the Plan should include a target to reduce Smoking at Time of Booking (SATOB) to 6% by 2026, on track to reach 2% by 2030.

Overcoming variation

- » As part of delivering on the smoking components of the NHS Long Term Plan (LTP), Integrated Care Systems (ICs) should work with Local Maternity Systems (LMSs) to develop a prevention plan setting out a minimum level of service delivery across the system to fully implement NICE guidance. Where areas are underperforming, they should work with their LMS to undertake a local review of practice and implement the findings.
- » ICs prevention plans should recommend that each NHS trust identify a named person to be responsible for the delivery of smokefree pregnancies. Activities within this role can include ensuring training is available, providing support and performance management, and engaging with external stop smoking services.

Training needs

- » NHS England, PHE, and Health Education England should work collaboratively with the royal colleges and professional bodies to implement the recommendations in the [ASH/Challenge Group 2017 report on maternity training](#), setting out their planned approach in the 2021 Tobacco Control Plan for England. National and regional training plans should:
 - Include specific training for maternity professionals to improve understanding of the role of nicotine in supporting pregnant women to quit smoking.
 - Set out a strategy to ensure that high quality, regular training is available for relevant professionals, specifically midwives, obstetricians, GPs, and health visitors. For example,

through a 'training the trainer' programme implemented across the system.

- Extend training on CO monitoring and delivering VBA to all professionals working with pregnant women including GPs, midwives, obstetricians, paediatricians, health visitors, mental health service providers, and professionals in children's services.
- Prioritise training for midwives working with the most disadvantaged populations, for example those delivering midwifery continuity of carer.

Tackling smoking in high prevalence communities

- » Additional investment to reduce rates of smoking in pregnancy should be greater in areas with the highest rates of SATOD. This should be in addition to existing funding for the NHS Long Term Plan.
- » ICSs should work with LMSs to ensure that there is a system-wide pathway to support women and communities before, during, and after pregnancy. This high-level plan should inform local action to address smoking before pregnancy and postnatally, in addition to the pregnancy pathway.
- » The 2021 Tobacco Control Plan should include a commitment to support and evaluate pathfinder areas for interventions to address high rates of relapse to smoking postnatally, and smoking among fathers, partners and other high prevalence groups and communities.
- » Using evidence of best practice and local examples, the Government should introduce a national incentive scheme focused on supporting women in high prevalence communities to quit smoking. The Government should work with localities to ensure that incentives are implemented alongside an evidence-based stop smoking pathway for pregnant women.

Using nicotine in pregnancy

- » ICSs should work with LMSs to review the current level of training on NRT use during pregnancy and recommend that all relevant maternity practitioners undertake training so that staff are equipped to advise pregnant smokers about the safety and efficacy of NRT. For example, NCSCT/e-LfH e-learning on delivering brief advice.
- » ICSs should work with LMSs and local authorities to identify the NRT offer locally and ensure that pregnant women and their partners can access 12 weeks of dual-form NRT on prescription via maternity services, stop smoking services, or primary care. This offer should be extended postnatally.
- » ICSs should work with LMSs and local authorities to ensure that that pregnant women are supported to use e-cigarettes if that is their preferred way to quit.

Data collection

- » NHSE and PHE should make smoking status at 36 weeks the official measure for smoking during pregnancy. This should be supported by a review of the availability of CO monitors in maternity settings. For women who deliver prior to 36 weeks their smoking status at delivery can be used instead. The collection of SATOD data should be maintained.
- » NHSE and PHE should develop standardised national guidance on how and when to record SATOD.
- » PHE should establish a new 'smoking cessation during pregnancy' indicator to capture the number of women recorded as smokers at their booking appointment who quit by delivery. This would provide a clearer measure of how effectively women are being supported to quit.
- » NHSE and PHE should mandate the collection of data on whether pregnant women are exposed to secondhand smoke in the home.
- » PHE should recommend that information about exposure to secondhand smoke in the home in the early years is collected in a standardised way by health visitors at a child's mandated reviews.

- » As part of implementing the smoking in pregnancy components of the NHS Long Term Plan, NHSE & PHE should establish a working group to address the challenges around data collection and data sharing. Key objectives should include:
 - Identifying a practical way of sharing patient data between stop smoking services, maternity services, and health visiting services. This should include data on referrals, smoking status, and quit status. Ongoing work to implement Digital Maternity Records could provide one way to enable better data sharing across different systems and clinical settings.
 - Publishing combined data showing the numbers of women receiving stop smoking support within NHS services and local authorities and the outcomes from that support. Support provided by the NHS is not currently captured in stop smoking service returns.
 - Identifying a way of tracking key indicators throughout and beyond pregnancy to better evaluate how effective localities are at supporting pregnant women to quit smoking and preventing relapse.
 - Ensuring that local data capture systems are consistent and allow the collection of nationally mandated data points.

Building back better after COVID-19

- » Priority should be given to reinstating Element 1 of the Saving Babies Lives Care Bundle as we emerge from the impact of the pandemic.
- » Localities should review and monitor populations which are more vulnerable to smoking and smoking during pregnancy as we emerge from the pandemic to ensure inequalities are not being further exacerbated. Communities experiencing increases in smoking prevalence should be offered stop smoking support and tailored interventions.
- » NIHR should evaluate the remote support offered by stop smoking services and maternity services during the pandemic to identify whether this support is effective for engaging pregnant women. NIHR should also evaluate current interventions for preventing relapse to smoking postnatally and reducing smoking rates among fathers and partners.
- » Local practice should be reviewed in line with new NICE guidance on smoking due to be published later in 2021.

1. Introduction

This report has been produced by Action on Smoking and Health (ASH) and the Smoking in Pregnancy Challenge Group. It sets out the action needed to turn the Government's ambition on smoking in pregnancy into a reality and seeks to inform the new Tobacco Control Plan.

ASH is a public health charity that works to eliminate the harm caused by tobacco. ASH was established in January 1971 by the Royal College of Physicians.

The Smoking in Pregnancy Challenge Group is a coalition of organisations committed to reducing rates of smoking in pregnancy. The Group was established in 2012 following a challenge from the then Public Health Minister to produce recommendations on how the smoking in pregnancy ambition contained in the Government's tobacco strategy could be realised.

The Challenge Group is a partnership between the Royal Colleges, the voluntary sector and academia. It presented its first report and recommendations in June 2013 and meets regularly to review progress. The Group is jointly chaired by Dr Clea Harmer, Chief Executive of Sands, and Professor Linda Bauld Director of the SPECTRUM Research Consortium and Chair of Public Health at the University of Edinburgh.

The harms of smoking in pregnancy

When a woman smokes during pregnancy, or when she is exposed to secondhand smoke, oxygen to the baby is restricted making the baby's heart beat faster and exposing the baby to harmful toxins. As a result, smoking or exposure to secondhand smoke during pregnancy is responsible for an increased rate of stillbirth, miscarriage and birth defects. This exacerbates existing health inequalities as women from more deprived backgrounds are more likely to smoke during pregnancy and to be exposed to secondhand smoke during pregnancy.

Smoking during pregnancy also increases the risk of children developing a number of respiratory conditions; attention and hyperactivity difficulties; learning difficulties; problems of the ear, nose and throat; obesity; and diabetes.¹

Table 1: Impact of smoking and exposure to secondhand smoke during pregnancy

	Maternal Smoking	Secondhand smoke exposure
Low birthweight	2 times more likely	Average 30-40g lighter
Heart Defects	9% more likely	Increased risk
Stillbirth	47% more likely	Possible increase
Preterm birth	27% more likely	Increased risk
Miscarriage	32% more likely	Possible increase
Sudden Infant Death	3 times more likely	45% more likely

Source: RCP. Hiding in plain sight: treating tobacco dependency in the NHS, 2018; RCP & RCPCH. Passive Smoking and Children, 2010

The financial impact of smoking in pregnancy

Smoking during pregnancy presents significant financial costs as well as human costs for the NHS. It was estimated that in 2015/16 the cost of smoking during pregnancy was over £20 million through 10,032 episodes of admitted patient care.² Audits conducted by NHS Trusts and maternity services paint a similar picture, with pregnant smokers requiring more complex care and placing additional costs on Trusts compared to their non-smoking counterparts. (See Appendix 1)

One audit, conducted by Barnsley Hospital NHS Foundation Trust, found that caring for 10 women who smoked during pregnancy cost the maternity unit approximately £46,820, compared to £13,548 for 10 non-smoking women. The additional costs were due to a combination of extra antenatal appointments, outpatient appointments, overnight admissions, ultrasound scans and the length of stay postnatally. The women who smoked were also more likely to have significant obstetric history (particularly relating to miscarriages) than non-smokers. (See Appendix 1)

Progress towards the Government's ambitions

The previous Smoking in Pregnancy Challenge Group report, published in 2018, reviewed the progress towards the ambition set out in the 2017 Tobacco Control Plan to reduce rates of smoking in pregnancy to 6% or less by 2022. Since the publication of the 2018 report, rates of smoking at the time of delivery (SATOD) for England have declined marginally from 10.8% to 10.4%, making it increasingly likely that the government will miss its 6% ambition, with tragic consequences for many families. Failure to tackle smoking in pregnancy also jeopardises the government's ambition to halve rates of stillbirth and neonatal and maternal death by 2025, with neonatal mortality rates flatlining since 2010. Without urgent action, the government is at risk of missing not only these ambitions, but also the ambition of making England smokefree by 2030 announced in the 2019 Prevention Green Paper.³

The NHS has placed prioritised reducing smoking in pregnancy through the Saving Babies Lives Care Bundle and the Long Term Plan (LTP), as part of its maternity safety agenda. This is welcome action but is yet to result in major declines to rates of smoking in pregnancy. This report takes a broader viewpoint, identifying areas where further progress can be made by addressing the existing variation in implementation and introducing new complementary ways to support women and their families to quit smoking and stay smokefree. However, to bring SATOD rates down at the pace required, action must be taken more widely to address smoking rates prior to conception and following birth, through a focus on population-level interventions for at-risk communities and by addressing the high prevalence of relapse to smoking postnatally.

New challenges and opportunities

The COVID-19 pandemic has significantly disrupted the provision of stop smoking support for pregnant women, with Carbon Monoxide (CO) monitoring and face-to-face stop smoking support paused for 8 months following the coronavirus outbreak. Initial evidence suggests that midwifery and stop smoking services have adapted their support offer to ensure that pregnant smokers continue to get the help they need to quit. The overall number of pregnant women being seen by stop smoking services appeared to go up in the first quarter of 2020/21 during the first national lockdown. It may be that the remote model of support is offered during the pandemic has advantages for pregnant women. However, reports indicate that referrals from maternity services have been affected by the pandemic with regions such as Greater Manchester seeing a substantial drop in the number of women identified as smokers at booking and referred to specialist services following the suspension of CO monitoring. Building back post-COVID-19 will require a thorough review of how changes in services have impacted pregnant women, what opportunities there are to

embed new forms of support, and where there is a need to reinstate approaches that have been lost.

Evidence shows that COVID-19 is disproportionately harming the most disadvantaged communities in our society, compounding existing health inequalities, of which smoking is a major contributor. People living in the most deprived areas also experience disproportionately high rates of infant mortality linked to high rates of smoking. Tackling smoking in the communities where smoking rates are highest would play a critical role in delivering an equitable recovery from the pandemic, building population health resilience, and driving down infant mortality.

In addition to the challenges brought about by the pandemic there are also major changes planned to public health delivery and the NHS England (NHSE) structure which creates both risks and opportunities for effectively addressing smoking in pregnancy. Public Health England's (PHE) closure⁴ and the need to embed a new structure risks disrupting existing strategies and distracting staff from the collaborative action needed to make progress. To date, the collaborative approach between NHSE and PHE in this area has been highly effective. However, the closure of PHE also presents opportunities for a new structure to create closer working relationships and secure greater public health action within the NHS.

As the Government strives towards delivering its ambition of a smokefree country by 2030, there is a major opportunity to end smoking in pregnancy and the harm it causes. But this will only be achieved by concerted action to reduce smoking rates before, during and after pregnancy.

2. Progress so far

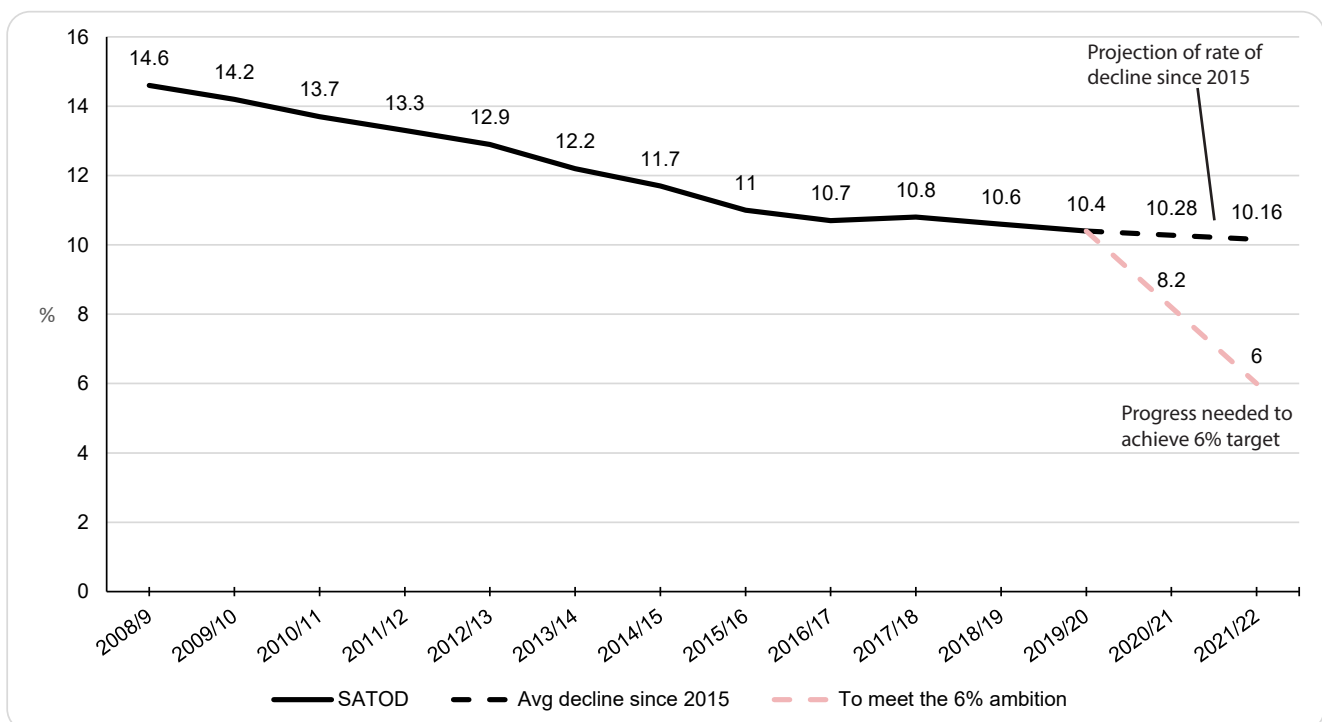
Key points

- » National rates of smoking in pregnancy have plateaued at just under 11% since 2015
- » Smoking in pregnancy rates need to decline by 2.2 percentage points a year to meet the government's 6% ambition by 2022
- » This would equate to around 30,000 fewer women smoking in pregnancy by 2022, contributing to fewer stillbirths, neonatal deaths, and sudden infant deaths
- » NHSE has made tackling smoking in pregnancy a central priority through the Maternity Transformation Programme and the Long Term Plan
- » Local authorities have continued to provide support to pregnant smokers despite substantial cuts to local stop smoking services.

ASH and the Challenge Group have welcomed the Government's ambition of reducing rates of smoking at time of delivery (SATOD) to 6% or less by 2022.⁵ If this ambition is realised, analysis shows that this would result in around 30,000 fewer women smoking in pregnancy in 2022 than in 2017/18.⁶

However, rates of smoking in pregnancy have plateaued at just under 11% since 2015, declining by only 0.6 percentage points. To hit the 6% ambition, from the 2019/20 SATOD rate of 10.4%, would require a rate of decline of roughly 2.2 percentage points a year until 2022.

Figure 1: Progress towards ambition to reduce SATOD to 6% or less by 2022 in England

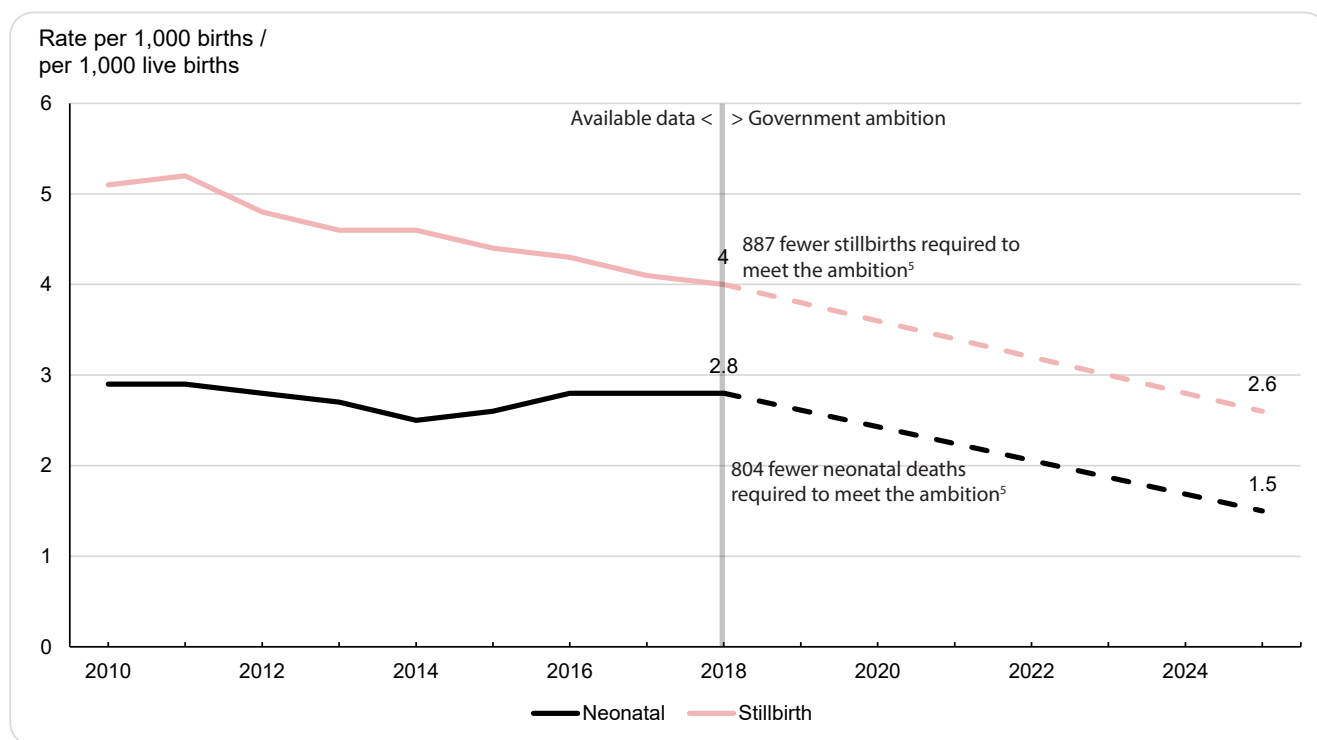


Meeting the 6% ambition would also make a sizable contribution to the national ambition to achieve 50% reductions in stillbirth, maternal mortality, neonatal mortality and serious brain injury by 2025.⁷ Although encouraging progress has been made in reducing stillbirth rates since 2010, neonatal mortality has flatlined during this period, with 2.8 deaths per 1,000 live births in 2018 compared to 2.9 per 1,000 in 2010.⁸ In 2018, the Challenge Group estimated that reducing smoking during pregnancy to 6% by 2022 would mean:

- » 45 – 73 fewer babies stillborn
- » 11 – 25 fewer neonatal deaths
- » 7 – 11 fewer sudden infant deaths
- » 482 – 796 fewer preterm babies and
- » 1455 – 2407 fewer babies born at a low birth weight.

Given this, we estimate that securing the Government’s ambition to reducing smoking in pregnancy would contribute between 8% and 13% of the reductions in stillbirths needed to meet the 2025 ambition and between 2% and 5% of the reductions in neonatal deaths. Without reducing levels of smoking in pregnancy the stillbirth and neonatal mortality ambitions will be more challenging to realise.

Figure 2: Progress against the ambition to halve stillbirths and neonatal mortality in England, 2010 to 2018



NHS action

The Maternity Transformation Programme (MTP) was established following the publication of Better Births in 2016 to improve outcomes in maternity care. This has included work to improve prevention and tackle health inequalities, as well as the publication of the Saving Babies’ Lives Care Bundle to reduce stillbirth prevalence through smoking cessation.^{9 10} The MTP is scheduled to conclude in March 2021 but much of its work will continue through other initiatives.

The NHS Long Term Plan (LTP), published in January 2019, set out a 10-year practical programme of phased improvements to NHS services and outcomes.¹¹ ASH and the Challenge Group have welcomed the commitments in the LTP to introduce NHS-funded smoking cessation services for

all inpatients who smoke (based on the CURE programme)¹² and to ensure delivery of an opt-out smokefree pregnancy pathway for expectant mothers and their partners. Areas with the greatest level of need will be prioritised with a commitment to support 600,000 people to quit over 5 years. This support will complement, rather than substitute, existing local authority-funded stop smoking services.

Local government action

Since 2013, local government has been responsible for commissioning support services for smokers, including pregnant women. The nature of service delivery in local authorities means that approach and practice are likely to vary between areas, taking into account local circumstances and decisions.

Despite substantial cuts to local stop smoking services since 2015, local government has continued to prioritise support for pregnant smokers, with 87% of local authorities surveyed by ASH providing stop smoking support to pregnant women in 2019.¹³ There is also strong collaboration between local stop smoking services and NHS maternity services, with almost two-thirds (59%) of local authorities providing stop smoking support in maternity care settings in 2020.¹⁴ Findings from the NREADY survey of specialist stop smoking in pregnancy support provided by NHS trusts and local authorities show that two-thirds of trusts with a stop smoking offer for pregnant women co-fund this offer with local authorities.¹⁵

In response to the COVID-19 pandemic, local stop smoking services have effectively reshaped their support for pregnant smokers, using remote methods of delivering advice and medications.

Challenge Group action

Since our last report in 2018, the Challenge Group has continued to advocate for the prioritisation of smoking cessation during pregnancy in national and local strategies, while providing frontline staff with tools and advice to support local practice. A range of resources are available on the Challenge Group website with key materials (such as 'test your breath' cards) available to bulk order free of charge for use with women and families. In total, approximately 1.5 million Challenge Group resources have been distributed to 145 maternity units.

The Challenge Group has also grown and extended its network with the establishment of the Smokefree Pregnancy Information Network and a national network of Smokefree Pregnancy Champions to provide maternity and public health professionals with updates, practical resources, and advice to improve implementation of national guidance to support pregnant women to quit smoking. Supported by funding from the Department of Health and Social care, the networks collectively support around 1,000 professionals with updates and access to learning, events, and resources.

In addition to front line support, we have also sought to engage strategic action on smoking in pregnancy. For example, we disseminate tailored annual briefings for Local Maternity Systems (LMSs) sharing best practice, national updates, and local data on smoking prevalence and SATOD.¹⁶

The Challenge Group has also undertaken a range of activity to support local practice throughout the COVID-19 pandemic, including producing resources and hosting a webinar on how to continue supporting pregnant women to quit during the COVID-19 lockdown. For more information about activity undertaken by the Challenge Group and resources available to support local practice see: <https://smokefreeaction.org.uk/smokefree-nhs/smoking-in-pregnancy-challenge-group/>

3. Achieving the Smokefree 2030 ambition

Key points

- » Efforts to reduce smoking rates among younger, poorer smokers are central to reducing rates of smoking in pregnancy and protecting pregnant women from secondhand smoke
- » There is an urgent need for more funding to deliver the comprehensive tobacco control programme necessary to reduce smoking rates in the most disadvantaged communities
- » Social marketing campaigns are effective and cost-effective in discouraging people from starting to smoke and encouraging existing smokers to quit, and can be effectively targeted at disadvantaged smokers
- » Raising the age of sale for tobacco to 21 would help to reduce smoking rates among young mothers who are more likely than older women to smoke and be exposed to secondhand smoke throughout their pregnancy.

In 2019, the Government set out their ambition for England to be smokefree by 2030,¹⁷ and reiterated this commitment in November 2020 in announcing their intention to publish a new Tobacco Control Plan for England by July 2021.¹⁸

ASH and the Challenge Group have welcomed this overarching ambition and are keen to see ambitious population level action to secure the drops in smoking rates needed for the country to become smokefree in the next decade. Efforts to reduce smoking for the whole population are highly relevant to reducing smoking in pregnancy rates and limiting exposure of pregnant women to secondhand smoke. If overall tobacco control strategies are not successful in reducing rates of smoking among women and men of childbearing age, particularly in low-income groups where smoking rates are highest, then maternity and stop smoking services will continue to face an uphill battle in supporting pregnant women to quit.

As such, ASH and the Challenge Group have backed the 'Roadmap to a Smokefree 2030'¹⁹ and the measures it sets out. Specifically, the measures most likely to impact on the population vulnerable to smoking during pregnancy are:

- » Well-funded tobacco control programme targeted to reduce inequality
- » Investment in social marketing campaigns
- » Raising the age of sale from 18 to 21

Well-funded tobacco control programme

Increased funding is essential for delivering a comprehensive tobacco control programme, prioritising disadvantaged communities and reducing health inequalities. ASH have estimated the cost of delivering the required comprehensive tobacco control programme in England to be less than £300 million per annum.²⁰ This is compared to an annual cost to society of £12.5 billion from smoking, a fifth (£2.4 billion) of which is borne by the NHS.²¹ In the Prevention Green Paper, the Government committed to considering options for revenue raising to achieve the 2030 ambition, including a "polluter pays" approach. A Smokefree 2030 Fund based on the polluter pays principle

would raise vital funds from the tobacco industry, while freeing up part of the current public health budget for other important areas such as obesity.

Currently, there is inadequate funding for tobacco control activity nationally, regionally and locally. This has resulted in cuts to many local stop smoking services, reducing their reach into disadvantaged communities with higher rates of smoking in pregnancy. Tobacco manufacturers are highly profitable and can and should be made to pay for the cost of tobacco control.²² Making tobacco manufacturers pay a levy or licence fee to the Government to fund measures to help smokers quit and prevent young people from taking up smoking is supported by three quarters (72%) of adults in England, with only 7% opposed.²³

Reaching disadvantaged smokers with social marketing campaigns

Social marketing campaigns are effective and cost-effective for discouraging people from starting to smoke and encouraging existing smokers to quit,^{24,25} and can be effectively targeted at disadvantaged smokers. Despite the effectiveness of such campaigns, PHE's budget for anti-smoking campaigns has declined substantially from £7.6 million in 2013/14,²⁶ to £1.8 million in 2019/20.²⁷ This compares to £24.9 million at the peak of investment in anti-smoking campaigns in 2009/10.²⁸ Due to budget cuts, the 2019 Stoptober campaign only employed digital and earned media at a national level,²⁹ dropping traditional media including TV, which is key for reaching those from more deprived groups.³⁰

The lack of national level campaigns has, to some extent, been compensated for by mass media campaigns at the regional level, particularly in the North East,³¹ Yorkshire, and Greater Manchester.³² These areas have also been able to amplify national messaging by engaging with local authority communications teams and securing local and regional media coverage.

National, regional, and local mass media campaigns have a crucial role to play in delivering declines in smoking prevalence across age groups, including among women of childbearing age and their partners and households.

Raising the age of sale for tobacco to 21

Young women have the highest rates of smoking during pregnancy and are also more likely than older women to smoke throughout their pregnancy.³³ They are also more likely than older women to be exposed to secondhand smoke by their partners, with a fifth of young men (aged 18-34) smoking, compared to 15.7% of men overall.³⁴ As such, driving down rates of smoking in the younger population should have a rapid impact on rates of exposure to smoke in pregnancy.

Experimentation with tobacco smoking is rare after age 21. US data highlights that while less than half of adult smokers (46%) become daily smokers before age 18, four out of five do so before they turn 21.³⁵ Analysis carried out by ASH shows that the proportion of young people in England trying smoking between ages 18 and 21, compared to before they turn 18, increased from 30% in 2011 to 35% in 2018.³⁶

A report by the US Institute of Medicine strongly concluded that increasing the tobacco age to 21 would significantly reduce the number of adolescents and young adults who start smoking; including improving the health of young mothers who would be deterred from smoking and the health of their children.³⁷ This could also impact the number of young mothers exposed to secondhand smoke from partners and their peers. The previous increase in the age of sale for tobacco from 16 to 18 was associated with reductions in regular smoking among young people and appeared similarly effective across all socioeconomic groups.³⁸

Recommendations: Achieving the smokefree 2030 ambition

- » The Government should implement the recommendations set out in the [Roadmap to a Smokefree 2030](#), including introducing a Smokefree 2030 Fund to provide sustainable funding for tobacco control, to drive down smoking rates among populations vulnerable to smoking during pregnancy.
- » The Government's 2021 Tobacco Control Plan should set a target for reducing Smoking at the Time of Delivery (SATOD) to 4% by 2026, putting England on track to deliver a smokefree start for every child by 2030. In addition, the Plan should include a target to reduce Smoking at Time of Booking (SATOB) to 6% by 2026, on track to reach 2% by 2030.

4. Overcoming variation

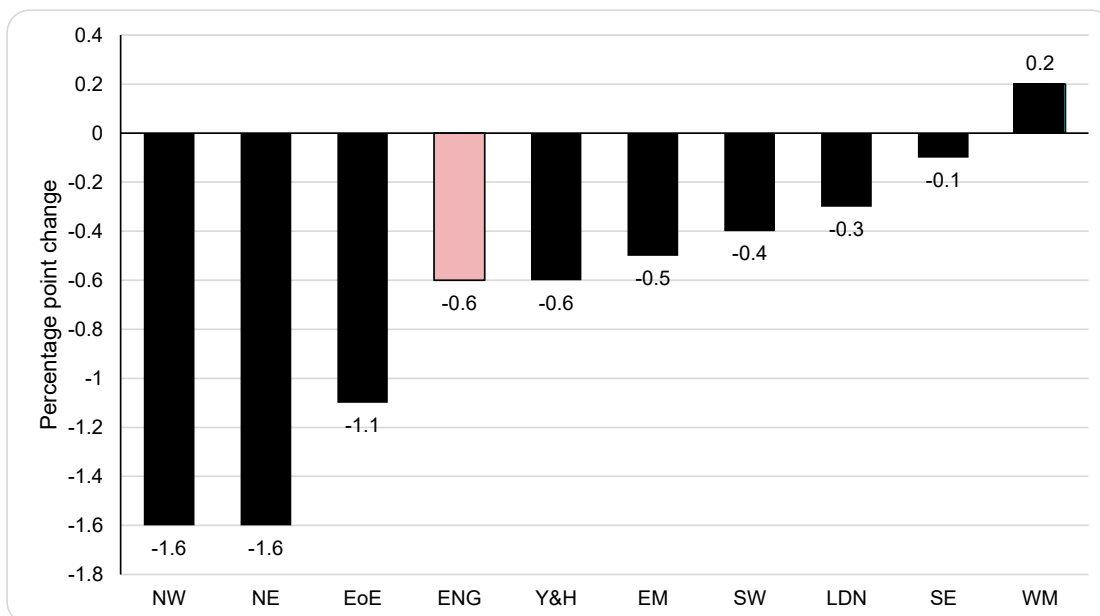
Key points

- » The stagnation in national SATOD rates since 2015 masks significant regional and local variation, with some regions reducing SATOD by more than double the England average, while others have seen SATOD flatline or even increase
- » There is a clear need to establish a minimum level of service delivery for pregnant women in both the NHS and local stop smoking services to maximise the impact of the NHS Long Term Plan
- » Despite the notable progress made over the last decade, there remains significant inconsistency in the implementation of NICE Guidance on smoking in pregnancy.
- » Cuts to tobacco control budgets have occurred alongside a substantial decrease in the number of pregnant smokers accessing stop smoking services
- » Midwifery Continuity of Carer (MCoC) presents opportunities for improving the quality of stop smoking support provided to pregnant women.

There is significant variation in rates of smoking at the time of delivery (SATOD) in different parts of England with only 4.8% of women smoking during pregnancy in London, compared to 15.2% in the North East. This variation is partly linked to deprivation and overall rates of smoking, with areas that are more deprived having higher rates of smoking, which typically corresponds with high rates of SATOD.

However, high rates of smoking in pregnancy in a locality are not necessarily an indication of poor local performance, with areas that have above average rates of SATOD achieving some of the biggest reductions in recent years. The stagnation in national rates of smoking in pregnancy since 2015 masks significant regional and local variation, with the North East, North West, and East of England reducing SATOD by more than double the England average. This compares to much more modest declines and even slight increases in other parts of the country.

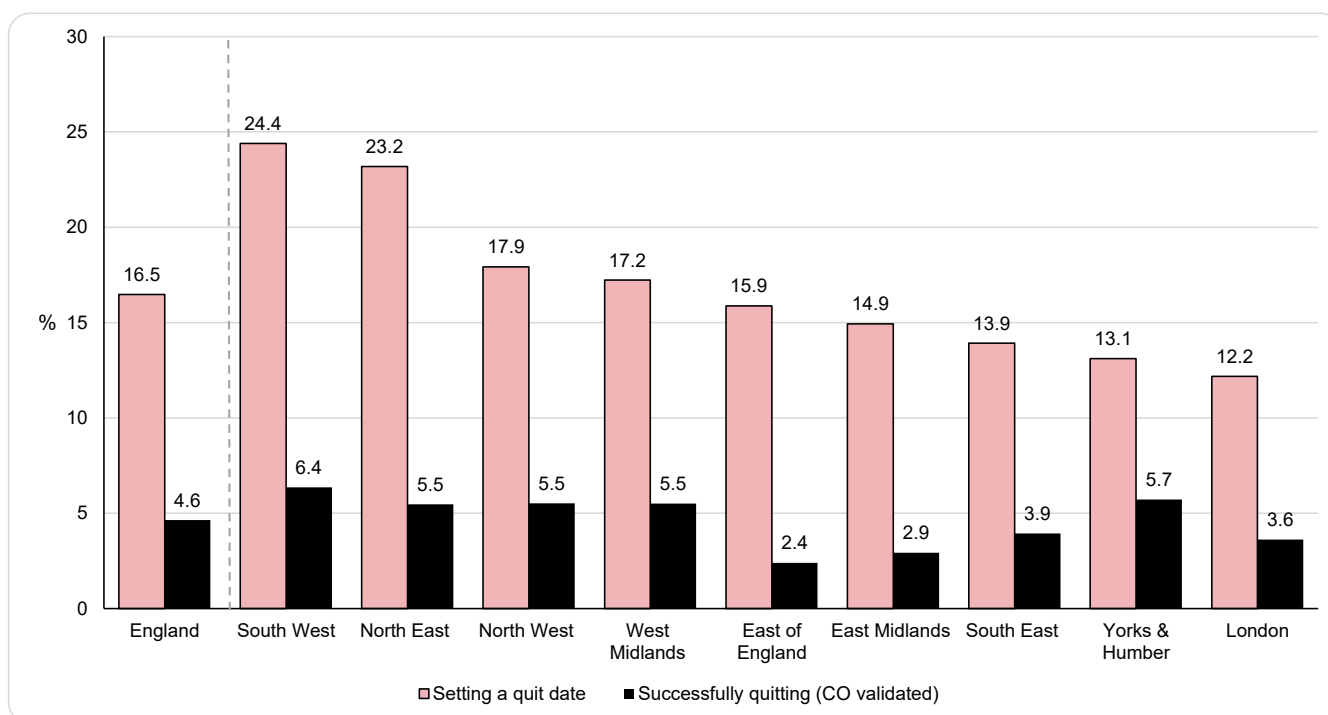
Figure 3: Regional change in SATOD rates between 2015/16 and 2019/20



This variation is mirrored among CCGs. Between 2015/16 and 2019/20 SATOD rates declined by 1 percentage point or more in just under half (44%) of CCGs. However, in a third (35%) of CCGs the rate of SATOD increased over the same period, with a fifth (20%) of CCGs seeing increases of 1 percentage point or more. (See Appendix 2) It should be noted that there are some limitations around the reliability and comparability of SATOD data. These are discussed further in Section 8: Data Collection.

A comparison of booking data and local authority stop smoking service returns from 2018/19 shows that some regions are more effective at engaging pregnant women who smoke with stop smoking services and subsequently supporting those women to quit (See Figure 4). In 2018/19, less a fifth (16.5%) of women identified as smokers at their booking appointment set a quit date with local stop smoking services and only 4.6% went on to quit. These figures vary substantially across different regions, with the South West engaging around one in four (24.4%) pregnant smokers with local services, compared to one in eight (12.2%) in London.

Figure 4: Percentage of women smoking at booking who set a quit date and succeeded in quitting with local authority stop smoking services (2018/19)



Comparison of NHS booking data and local authority stop smoking service returns from 2018/19. As this is a comparison of two separate datasets it does not compare individual women. Figures on quitting outcomes are taken from local authority stop smoking service returns which do not account for stop smoking support commissioned by the NHS. Additionally, some women will have quit without support.

There are likely to be many contributory factors to the differences in progress across local areas. Local and national government and NHS organisations need to take note of:

- » the continued variation in how NICE guidance is implemented locally
- » the extent to which local NHS organisations are embedding support for pregnant women who smoke
- » changing local demographics: tailored approaches are required to engage people from migrant communities with high rates of smoking
- » the availability of local authority funded stop smoking support. If efforts to drive down national rates of smoking in pregnancy are to be successful, it is vital that the areas where SATOD is rising receive enhanced support from NHS England.

However, it is clear that many of the areas that have seen sustained declines in rates of smoking in pregnancy are those with coordinated regional and local strategies. A combination of targeted interventions and wider population interventions is most effective for reducing rates of smoking during pregnancy.

NHS Long Term Plan

The NHS Long Term Plan (LTP) commits to providing a pathway of stop smoking support for pregnant women and their partners within the NHS, in addition to the stop smoking services commissioned by local authorities. Approximately 43% of NHS trusts surveyed already commissioned specialist stop smoking support for pregnant women in 2020/21.¹⁵ However, variation in levels of service delivery and the disconnect between many NHS and local authority services presents significant challenges to the implementation and efficacy of the LTP. There is a clear need to establish a minimum level of service delivery for pregnant women in both the NHS and local stop smoking services to maximise the impact of the NHS Long Term Plan.

Implementing NICE guidance

NICE guidance on smoking in pregnancy has been in place since 2010. While the roll out of the Saving Babies Lives' Care Bundle has supported implementation of NICE guidance, inconsistencies remain. An evaluation of the implementation of the Saving Babies' Lives Care Bundle across 19 trusts, published in 2018, found that implementation of CO monitoring was fairly well accepted and implemented, with the exception of one trust that reported never CO testing women. However, referrals into stop smoking services were patchy, with 7 trusts reporting that they never or infrequently referred women to stop smoking services.³⁹ This evaluation was based on self-reported feedback from trusts.

This is illustrative of the variation in practice between trusts and highlights the need for more work to monitor and review the implementation of key support for women. Local Maternity Systems (LMSs) have a key role to play in ensuring there are clear pathways of support in place for pregnant women. Implementation of CO monitoring and opt-out referrals to specialist stop smoking support must be key indicators for LMSs to monitor local progress.

Evidence suggests that healthcare practitioners welcome guidance around supporting women to stop smoking,⁴⁰ especially guidance on how to address smoking without damaging their therapeutic relationship. However, this must be embedded within clinical teams and have clinical ownership to ensure best practice is maintained. Version 2 of the Saving Babies Lives' Care Bundle recommends that all relevant maternity staff should receive training in CO monitoring and delivering brief advice on smoking. This training is key to enabling practitioners to support pregnant women to quit smoking.

Some localities have reviewed their local maternity services' implementation of NICE guidance PH26 and PH48 to assess barriers to local implementation and ensure all women are receiving the best care throughout their pregnancy. PHE's [CLeaR self-assessment tool on smoking in pregnancy](#) allows localities to benchmark themselves by working through a series of questions on their implementation of NICE guidance and other key measures.

Case study: Overcoming variation in West Yorkshire and Harrogate

West Yorkshire and Harrogate Local Maternity System undertook a system-wide review of the provision of stop smoking support for pregnant women across the LMS. The initial phase of this work was undertaken through a regional partnership which included Yorkshire and the Humber (Y&H) Clinical Network, Public Health England Y&H and the three Y&H LMSs. To identify how best to embed treatment for smoking in pregnancy across the region two workshops were held with a range of stakeholders from maternity services, commissioning, public health and service provision.

Following the first workshop, a whole system mapping exercise was undertaken to identify existing provisions and services, how they were commissioned, and how these could be embedded across an LMS. A follow up workshop reviewed the outcomes from the mapping exercise and assessed: *'What extra support is needed at an LMS level?'* and *'What should the LMS smoking in pregnancy prevention and treatment journey look like throughout pregnancy?'* Three outputs (documents) were developed and provided to each LMS for implementation, including a smoking in pregnancy pathway highlighting the key touchpoints for healthcare services to engage with women from preconception to early years.

Together with partners from health and social care, local authorities, and the voluntary sector, the LMS launched a prevention and postnatal workstream to embed the identified touchpoints across all partners within the LMS to ensure women have access to seamless and equitable services across West Yorkshire and Harrogate. The workstream undertook a deep dive into stillbirths across the LMS and produced recommendations covering health behaviours (including smoking in pregnancy) for implementation across the system.

Stop smoking services

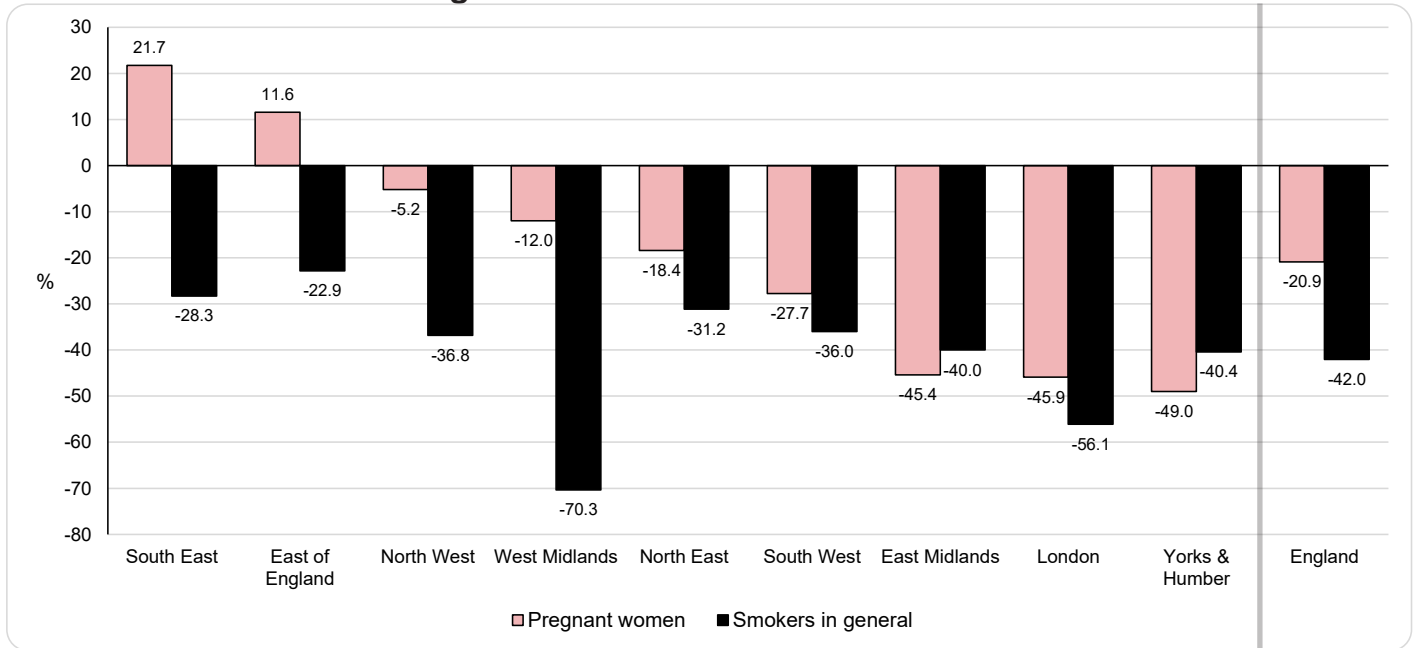
Opt-out referral to specialist stop smoking support is a key part of the smoking in pregnancy care pathway recommended by NICE,⁴¹ and set out in the Saving Babies' Lives Care Bundle.⁴¹ The majority of this support is delivered by local authority stop smoking services, which are highly effective and cost-effective at supporting smokers to quit. However, there is stark inequity in the local authority offer to smokers across England. Research conducted by ASH and Cancer Research UK shows total local authority spending on stop smoking services and tobacco control in England fell by 36% from 2014/15 to 2018/19 that 38% of local authorities no longer commissioned a universally accessible stop smoking service in 2020.¹³ This follows cuts of around a fifth to the public health budget between 2015/16 and 2019/20.⁴³ While most of the areas that have closed their universal service have maintained some provision for pregnant women, efforts to reduce maternal smoking and prevent relapse are dependent on: (1) women being able to access stop smoking support before pregnancy and after birth, and (2) their households and families also having access to support. In some areas, stop smoking services have been decommissioned altogether, resulting in a postcode lottery in the availability of support to help people quit.

Cuts to tobacco control budgets have occurred alongside a substantial decrease in the number of smokers accessing local authority stop smoking services, with a 42% decline in the number of people setting a quit date with these services between 2015/16 and 2019/20.^{44 45} This trend is replicated among pregnant women, albeit to a lesser extent, with 21% fewer pregnant women setting a quit date with local stop smoking services in 2019/20 than in 2015/16. Targets to reduce smoking in pregnancy and create a smokefree generation will prove extremely challenging to achieve if these declines are not addressed.

The national decline in the number of smokers accessing stop smoking services since 2015 is mirrored at the regional level, with the West Midlands experiencing a 70% decline in smokers setting

quit dates between 2015/16 and 2019/20, for instance (See Figure 5). For pregnant women the picture is more varied, with the East Midlands, Yorkshire and the Humber, and London seeing the biggest falls in the number of pregnant women setting a quit date with stop smoking services, while the South East and East of England have seen modest increases. In two regions the decline in footfall among pregnant women has been larger than the decline among smokers in general.

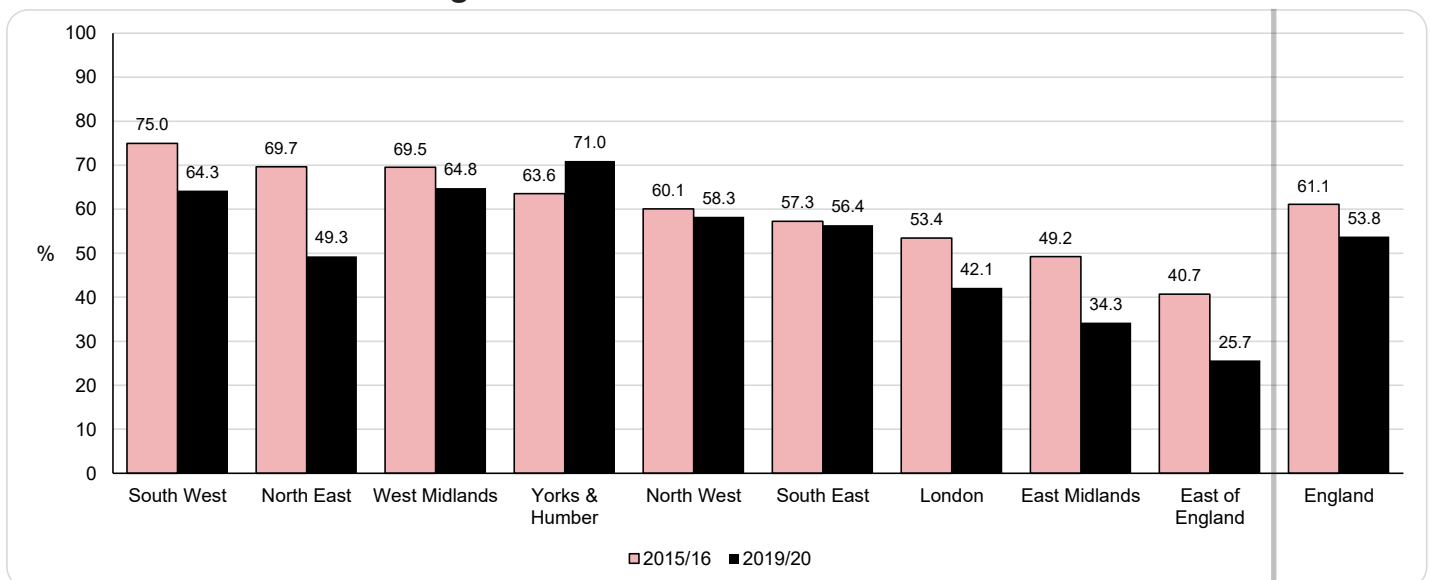
Figure 5: Change in the number of smokers setting a quit date with local authority stop smoking services between 2015/16 and 2019/20



These figures are taken from local authority stop smoking service returns which do not account for stop smoking support commissioned by the NHS. Changes in maternity rates and smoking prevalence may also have had a minor impact on the number of people accessing stop smoking services.

There is considerable regional variation in the use of CO monitoring to verify quits among pregnant women by local stop smoking services. For example, in 2019/20 services in Yorkshire and the Humber CO validated 71% of pregnant quitters, compared to 42% in London, and only 26% in the East of England. Given that CO monitoring is recommended by NICE for verifying quits,⁴⁶ it is concerning that CO verification of quits among pregnant women has declined in every region except for Yorkshire and the Humber since 2015/16 (See Figure 6). This long-term decline may be compounded by the temporary suspension of CO monitoring and face-to-face stop smoking support in response to COVID-19.

Figure 6: Percentage of pregnant quitters verified by CO monitoring in local authority stop smoking services between 2015/16 and 2019/20



Midwifery Continuity of Carer

'Continuity of carer' refers to maintaining consistency in the midwife or clinical team that provides care for a woman and her baby throughout the three phases of her maternity journey: pregnancy, labour and the postnatal period.⁴⁷ Women who receive midwifery-led continuity of carer are 16% less likely to lose their baby, 19% less likely to lose their baby before 24 weeks and 24% less likely to experience pre-term birth. They also report significantly improved experience of care across a range of measures.⁴⁸

Continuity of carer can significantly improve outcomes for women from ethnic minority backgrounds and those living in the most deprived areas, who typically have the worst birth outcomes.⁴⁹ It is being implemented across England through the Maternity Transformation Programme, which is scheduled to be rolled out to 75% of women from the most vulnerable groups by March 2024.⁵⁰

The continuity of carer model allows midwives to better address individual needs and concerns as the midwife knows the patient and their family. This presents additional opportunities to promote public health and address maternal smoking and is beneficial for vulnerable and 'at-risk' families, who may require more time and tailored support.⁵¹ This is particularly valuable in the context of smoking during pregnancy, as evidence shows that complex social factors are twice as prevalent among women who are smokers at the time of their first booking appointment (22.4%), compared to non-smokers (11.3%). Complex social factors include poverty, homelessness, substance misuse, and being aged under 20.^{52 53}

A continuity of carer model creates opportunities for midwives to better address smoking through:

- » Building stronger relationships which can improve the quality of conversations with women about smoking
- » Being better informed about each woman's quit journey, enabling them to follow up on referrals, make repeated referrals if necessary, follow and deliver consistent messaging about quitting, and improve the recording of data on smoking status throughout pregnancy.

Continuity of carer also enables midwives to provide support and positive reinforcement postnatally and ensure that the woman's smoking status is flagged during the handover to health visiting services, to enable ongoing cessation and relapse prevention support.

Reorganising public health: the importance of national, regional and local delivery

Smoking prevalence in Britain has decreased by 60% since the start of the century, driven by a strategy combining national population-level interventions in support of place-based interventions by local authorities and the NHS, which are most effective when supported by regional programmes. PHE's closure and the need to embed a new public health structure creates both risks and opportunities for effectively addressing smoking in pregnancy.

Nationally, PHE has played a central role in building a consistent and coherent approach to tackling smoking during pregnancy, in addition to providing health surveillance, monitoring and analytical functions which are crucial to effective policy development. Regionally, PHE has worked to enhance the quality and consistency of service delivery while supporting collaboration between local government and NHS organisations. This includes working closely with regional programmes in the North East, Yorkshire and the Humber, and Greater Manchester, which are widely considered to be examples of best practice.

However, there are opportunities for a new structure to create closer working relationships locally and secure greater public health action within the NHS. The new public health system should follow

this model of national, regional and local delivery for health improvement. This is essential if we are to achieve the government's Smokefree 2030 ambition, reduce rates of smoking in pregnancy to 6% or less by 2022, and reduce health inequalities. With only 2 years left to achieve the 6% ambition, there is an urgent need to define a new responsible authority to take the lead on this agenda and ensure the valuable role played by PHE continues unabated.

See also:

- » PHE. [CLear self-assessment tool for smoking in pregnancy](#)
- » [Joint statements to the Government on public health reorganisation](#)

Recommendations: Overcoming variation

- » As part of delivering on the smoking components of the NHS Long Term Plan (LTP), Integrated Care Systems (ICSs) should work with Local Maternity Systems (LMSs) to develop a prevention plan setting out a minimum level of service delivery across the system to fully implement NICE guidance. Where areas are underperforming, they should work with their LMS to undertake a local review of practice and implement the findings.
- » ICS prevention plans should recommend that each NHS trust identify a named person to be responsible for the delivery of smokefree pregnancies. Activities within this role can include ensuring training is available, providing support and performance management, and engaging with external stop smoking services.

5. Training needs

Key points

- » The maternity workforce would benefit from more consistent training on delivering stop smoking interventions and carrying out CO testing with pregnant women
- » There are a range of other professional groups outside of maternity who are well placed to intervene with women before and after pregnancy, and where a further assessment of training would be appropriate
- » There are major gaps in the postgraduate and undergraduate training of maternity professionals which reduces their ability to appropriately support women to stop smoking in pregnancy.

Progress has been made in providing appropriate training to staff in maternity services, with version 2 of the Saving Babies Lives Care Bundle recommending that all relevant maternity staff receive training on the use of the CO monitor and delivering brief advice (VBA). This should be extended to all health professionals working with women who smoke while pregnant, to ensure that women receive consistent messaging throughout pregnancy. Efforts to mainstream training in maternity services are often limited by staff turnover and competing institutional priorities. It is essential that high quality, regular training is available at a local and regional level for all health professionals working with pregnant women.

Evidence shows that training health professional students to deliver smoking cessation interventions can improve patient quitting behaviours.⁵⁴ However, a 2017 review of midwifery and obstetrics training published by ASH and the Challenge Group, found major gaps in the postgraduate and undergraduate training of professionals which reduces their ability to appropriately support women to stop smoking in pregnancy.⁵⁵ The review found that both midwives and obstetricians generally lack the training necessary to engage women in meaningful conversations about their smoking and motivate them to access quit support. There are also gaps in understanding about the use of nicotine replacement therapy and in the practical delivery of CO screening.

Although current guidelines state that qualified midwives must be able to conduct conversations with women about smoking – alongside a range of other health behaviours – the precise competencies underpinning this and the training required are not specified.⁵⁶ Additionally, there are a range of other professional groups that are well placed to intervene with women before and after pregnancy, and where a further assessment of training would be appropriate. Requiring staff working across children's services, sexual health services and health visiting to complete training on the delivery of brief advice (e.g. available online from the National Centre for Smoking Cessation and Training) would give these professionals the skills they need to engage families in these conversations.

See also:

- » ASH & the Smoking in Pregnancy Challenge Group. [Smokefree Skills: An assessment of maternity workforce training](#). 2017
- » Smoking in Pregnancy Challenge Group [training resources](#)
- » e-Learning for Healthcare. [Supporting a smokefree pregnancy e-learning programme](#)

Recommendations: Training needs

- » NHS England, PHE, and Health Education England should work collaboratively with the royal colleges and professional bodies to implement the recommendations in the [ASH/Challenge Group 2017 report](#) on maternity training, setting out their planned approach in the 2021 Tobacco Control Plan for England. National and regional training plans should:
 - Include specific training for maternity professionals to improve understanding of the role of nicotine in supporting pregnant women to quit smoking.
 - Set out a strategy to ensure that high quality, regular training is available for relevant professionals, specifically midwives, obstetricians, GPs, and health visitors. For example, through a 'training the trainer' programme implemented across the system.
 - Extend training on CO monitoring and delivering VBA to all professionals working with pregnant women including GPs, midwives, obstetricians, paediatricians, health visitors, mental health service providers, and professionals in children' services.
 - Prioritise training for midwives working with the most disadvantaged populations, for example those delivering midwifery continuity of carer.

6. Tackling smoking in high prevalence communities

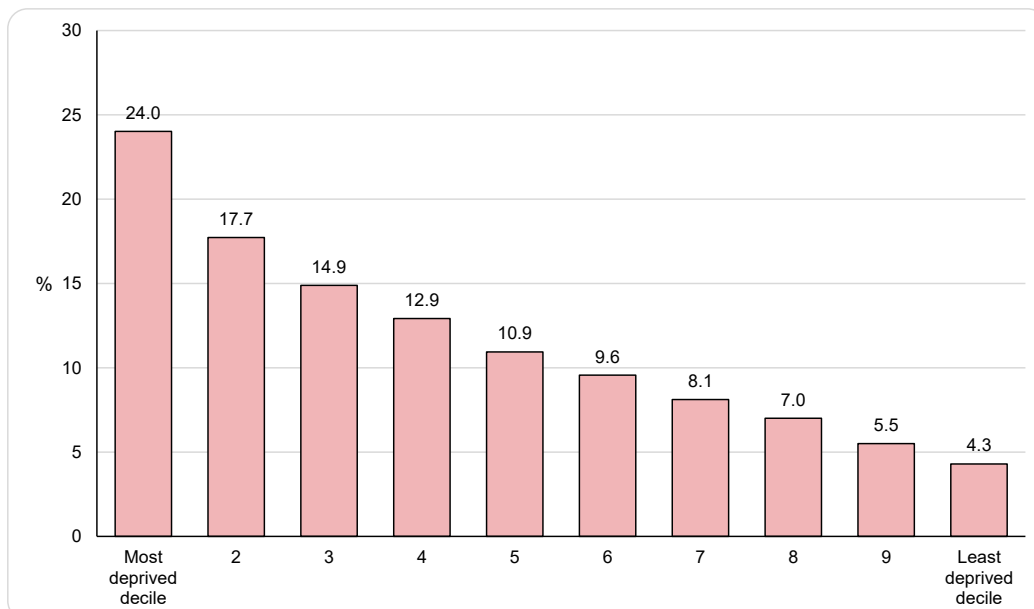
Key points

- » Women from disadvantaged backgrounds are more likely to smoke before pregnancy; less likely to quit during pregnancy and more likely to relapse postpartum
- » Population level interventions to reduce smoking prevalence among young men and women from more deprived groups are likely to be effective for reducing rates of smoking and exposure to secondhand smoke during pregnancy
- » Women who are exposed to secondhand smoke in the home during pregnancy find it harder to quit smoking and experience many of the same adverse birth outcomes that are experienced by women who smoke
- » Household-level interventions can be effective for engaging smoking partners as they frame smoking as a household responsibility with family-wide impact
- » Incentives to support smokers to quit during pregnancy are an effective way of supporting pregnant women, particularly those from deprived backgrounds, to quit smoking during pregnancy and remain quit post-partum.

As in the general population, smoking rates among pregnant women increase with indicators of disadvantage. Women from disadvantaged backgrounds are more likely to smoke before pregnancy; less likely to quit during pregnancy and, among those who quit, more likely to relapse after childbirth.⁵⁷

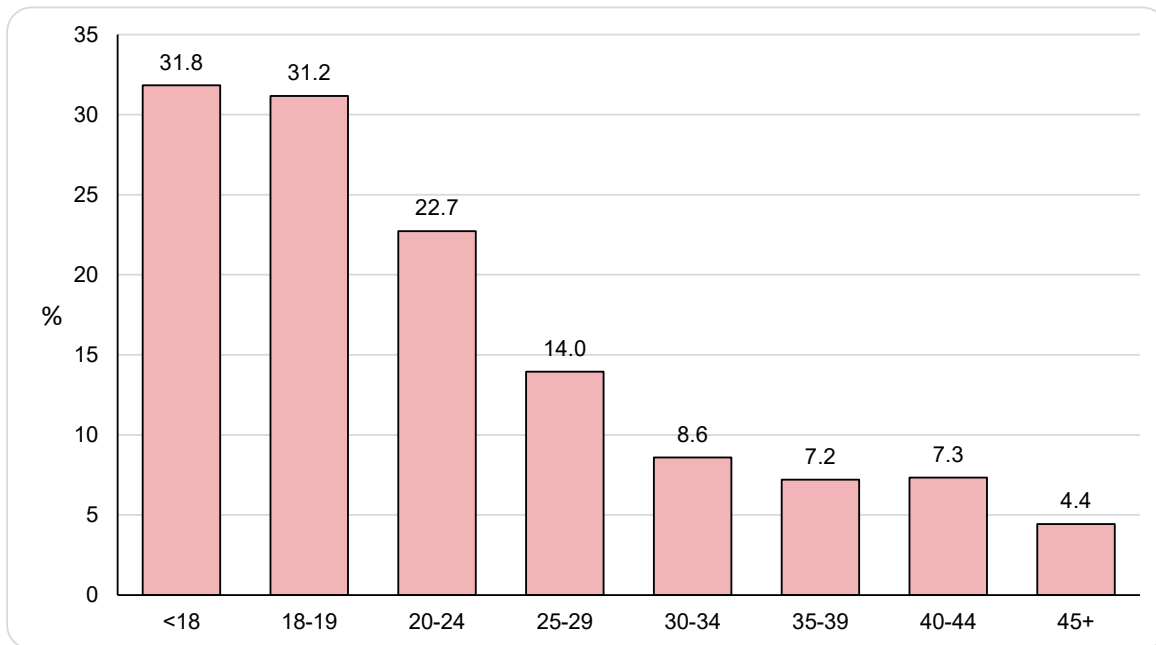
Rates of smoking among white women (aged 18-34) in routine and manual occupations are currently more than double that of women on average (26.7% compared to 12%), although the difference between these two groups has narrowed since 2012.⁵⁸ It is not currently possible to break down other ethnic groups due to small sample sizes. Booking data from 2018/19 shows that smoking rates among women in the most deprived decile are over five times greater than those in the least deprived decile (24% and 4.3% respectively), with a clear gradient across the deciles (See Figure 7).⁵⁹

Figure 7: Rates of smoking at booking by deprivation decile (2018/19)



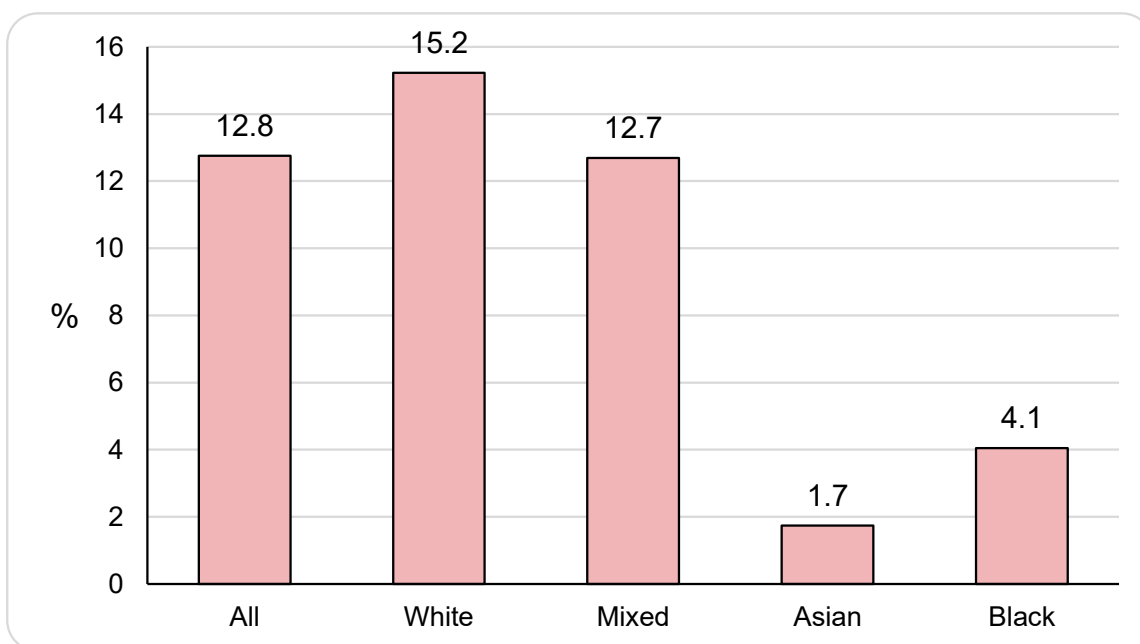
Further, younger women are most likely to smoke during pregnancy and are least likely to quit. In 2018/19, 30% of women aged under-20 were current smokers at their booking appointment compared to just 6% of women over the age of 40.⁶⁰ Nearly a third of women aged under-18 continue to smoke in their first pregnancy, rising to almost 40% for those booking for a subsequent pregnancy in the same age group.⁶¹ High rates of smoking among younger, more deprived women correspond with significantly higher rates of infant mortality than in the general population (See Figure 8).⁶²

Figure 8: Rates of smoking at booking by age (2018/19)



Smoking at booking rates are highest among the 'white' (15.2%) and 'mixed' (12.7%) ethnic groups, which account for 86% and 2.2% of the population, respectively (See Figure 9).⁶³ Although overall smoking and smoking at booking rates are lower than average in black and Asian populations, there is a substantial gender disparity, with black and Asian men having much higher smoking rates than women in the same groups.⁶⁴ This means that pregnant women and children in these communities may still be exposed to secondhand smoke in the home through fathers, partners and other adults in the household.

Figure 9: Rates of smoking at booking by ethnicity (2018/19)



Between 2001 and 2011, there was a shift in the ethnic background of white people living in England and Wales, with the proportion of the population classed as 'Other white' increasing from 2.6% to 4.4%.⁶⁵ The 'Other white' group includes communities from Eastern European countries with high rates of smoking, particularly Poland and Romania which have smoking rates of 25.3% and 23.5% respectively.⁶⁶ There is a risk that current stop smoking interventions are not sufficiently engaging women from high-smoking-prevalence migrant communities. This is due to several factors, including differing cultural attitudes to smoking during pregnancy and smoking within the home, language barriers, low exposure to health messaging, and a lack of trust in health advice delivered by maternity professionals.

Population level interventions to reduce smoking prevalence among young men and women from more deprived groups are likely to be effective for reducing rates of smoking and exposure to secondhand smoke during pregnancy. This approach should be supported by targeted interventions to support pregnant women and their partners or household members to quit smoking. Interventions should include financial incentives and support relapse prevention are effective in promoting smoking cessation in pregnancy.⁶⁷

Smokefree homes and families

Most work to reduce rates of smoking in pregnancy has focused on the women who smoke, rather than the environments in which they live. For many women struggling to quit throughout pregnancy, the home environment will play a crucial role in whether they are smoking at conception, if they are able to successfully quit, whether they relapse to smoking once the baby is born, and whether they and the baby are exposed to secondhand smoke.

Women who live with a smoker are six times more likely to smoke throughout pregnancy and, if they manage to quit, more likely to relapse once the baby is born.⁵⁷ An estimated 20% of women are also exposed to secondhand smoke in the home throughout their pregnancy,⁶⁸ making it harder for them to quit smoking,⁶⁹ and leading to many of the same adverse birth outcomes that are experienced by women who smoke.^{70 71 72}

The commitment in the NHS Long Term Plan to a dedicated pathway of support for pregnant women and their partners around smoking is especially welcome. However, evidence suggests that nearly half of women who quit smoking during pregnancy relapse post-partum.⁷³ It is vital that women and their partners have access to stop smoking support before, during, and after pregnancy to help them stay smokefree.

Reaching more professionals

There is an opportunity for a wider range of services to intervene to support families and communities to become smokefree, as part of addressing rates of smoking in pregnancy. There are many professionals who have regular contact with families and prospective parents who could play an important role in highlighting the benefits of quitting smoking and could direct mothers, fathers and other household members to cessation support. This includes maternity professionals such as midwives, health visitors, and paediatricians but also professionals in children's services, social housing providers, family planning and sexual health services, and mental health service providers. Reaching these groups will require engagement from commissioners to maximise the delivery of VBA and ensure professional groups such as Health Visitors are trained to have these conversations. Further pilot programmes are needed to increase the evidence on what works for engaging families and households with smoking cessation.

Case study: Supporting vulnerable pregnant women to stop smoking⁷⁴

The Family Nurse Partnership (FNP) is a nurse-led, evidence-based, home visiting programme which works with vulnerable first-time parents aged under 24 from early pregnancy up to the child's second birthday. In January 2019, the FNP embarked on six-month quality improvement project with the aim of improving smoking quit rates for young women in pregnancy.

Five FNP sites were involved in the project over six months. Between these sites 57 clients reached the 36-week gestation period during the project life cycle and 22 nurses took an active role in the project. The project consisted of three major cycles of improvement:

1. Embedding the use of CO monitors in every visit with a pregnant client, regardless of smoking status.
2. NCSCT online training for all staff, alongside training and resources to support smoking cessation interventions.
3. Introduction and amplification of team skills practice, where teams regularly came together to role-play their interventions, fine-tuning their effectiveness.

By the end of the project, 64% of clients who initially smoked had stopped smoking (CO reading of less than 4ppm) by 36 weeks gestation, with anecdotal evidence of households going smokefree. Despite early nurse caution about how regular CO monitoring would be received by clients, clients were overwhelmingly positive about the use of monitors. Some of their family members even volunteered to have their carbon monoxide levels checked. Critically, nurses were more confident to make a successful intervention where they had good links with local smoking cessation services or were able to prescribe nicotine replacements themselves.

Engaging fathers

Inequalities in smoking rates among men mirror those for women, with 30.9% of young (18-34) white men in routine and manual occupations smoking, compared to 15.7% of men overall.⁷⁵ Women living with these men are more likely to be exposed to secondhand smoke and less likely to have a home environment that facilitates quitting. Interventions that are delivered at the household level and encourage men to take responsibility for their smoking behaviour can be effective for engaging smoking partners, as they frame smoking as a household responsibility with family-wide impact. Household interventions can also be an effective way to engage pregnant smokers and increase quit rates, particularly when combined with financial incentives and NRT provision.

The midwifery service at Poole Hospital NHS Foundation Trust undertook a pilot to increase the engagement of partners with stop smoking support. As part the 12-week programme, specialist stop smoking midwives provided pharmacotherapy and behavioural counselling sessions to pregnant smokers and their smoking partners/household members. The women and their partners/household members were seen in tandem and were jointly offered direct pharmacotherapy, avoiding the need for two separate pathways. Participants were CO monitored throughout the scheme to validate the quit and provide additional motivation. Following the pilot, engagement rates among partners increased from 4% to 39% and partner quit rates increased from 2.2% to 60%. Services also need to consider other ways to engage young men before and after they become fathers. Localities should investigate whether there are particular workplaces employing lots of young men locally and whether this group is accessing other services (e.g. mental health services).

Partnering with social housing providers is also likely to be an effective way of reaching this cohort. Smoking rates among people living in social housing are more than double the national average at approximately 35%,⁷⁶ so improving reach into these communities is likely to be an effective way to target young smokers. Services should also look at trialling different types of health messaging that focuses on fathering and men's experiences, while considering the role that digital stop smoking and health promotion programmes can play in reaching men who are less likely to access other services.⁷⁷

See also:

- » Smoking in Pregnancy Challenge Group. [Evidence into practice: Supporting partners to quit smoking](#). 2020
- » Smoking in Pregnancy Challenge Group. [LMS Smokefree Pregnancy Pathway](#). 2020

Introducing incentives

There is a clear need for more intensive, targeted approaches to support pregnant women to quit smoking. A 2019 Cochrane review of the evidence on financial incentives found that they are an effective way of supporting pregnant women to quit smoking during pregnancy and remain quit post-partum, with women receiving incentives more than twice as likely to quit compared to those in non-incentivised groups.⁷⁸ This has immediate impacts, with evidence from Glasgow showing that women who quit smoking with the support of incentives had an average 145 grams increase in birth weight.⁷⁹ There is also evidence for longer term impact, as the effectiveness of incentives appears to be sustained even after the withdrawal of incentives, both at the end of pregnancy and post-partum.⁷⁸

Significantly, research has found that incentives are effective among heavier smokers who are likely to be the most disadvantaged.⁸⁰ This is supported by evidence from a 2013 incentive scheme in the North West which specifically recruited women who were living with a smoker, living in an area of high smoking prevalence or deprivation, had smoked throughout a previous pregnancy or were teenagers. Results showed 69% of women receiving incentives were CO validated as quit after 4 weeks compared to 41% of those receiving standard support.⁸¹ Incentives are also a highly cost-effective intervention with an estimated return on investment of £4 for every £1 invested.⁸¹

These interventions can also engage other members of women's households, with a range of schemes offering vouchers for a 'significant other supporter' (SoS) if women remain quit post-partum. These SoS either have to be non-smokers or undertake a quit attempt alongside the woman herself. Evidence suggests that women who engage with the support of a SoS may be more successful at quitting and maintaining that quit attempt compared to women not supported by an SoS.⁸¹

As part of their 'Making Smoking History' strategy,⁸³ Greater Manchester has implemented an evidence-based⁸⁴ incentive scheme targeting disadvantaged pregnant women alongside comprehensive implementation of NICE Guidance to support more women to quit and remain smokefree post-partum. This Supporting a Smokefree Pregnancy Scheme (SaSFPS) includes engagement of a SoS and continues with a post-partum incentive for remaining smokefree. Over a period of 18 months, women on the scheme with an SOS were almost twice as likely (62%) to achieve a 4-week quit than those without (38%). This trend continued through to delivery and 12 weeks postpartum, although the overall numbers of women who maintained their quit decreased throughout pregnancy and postpartum.⁸⁵ SATOD rates in Greater Manchester have declined rapidly since the scheme launched, falling from 12.6% in 2017/18 to 11.1% in 2019/20.⁸⁶ This is almost four times larger than the decline in England as a whole over the same period.

Case study: Using financial incentives to drive down SATOD rates in South Tyneside

In 2017, in collaboration with NHS England and the local CCG, the South Tyneside Local Authority public health team developed a smoking in pregnancy incentive scheme (SIPIS). The incentive scheme is part of a wider programme of work around tobacco control and stop smoking that aims to reduce population smoking prevalence. The scheme entails providing *Love2Shop* gift cards to pregnant smokers who reach key dates along the quit pathway, with the value of the gift card increasing the longer the woman maintains a quit. The incentive scheme was delivered from local children's centres, which provide an easily accessible, friendly, non-clinical environment for women and families.

Key outcomes for the 2018/19 cohort include:

- » 100% (97) of women referred with a voucher attended their referral, compared to only 24% (34) of those referred without a voucher.
- » 63% (61) of participants were quit at 4 weeks compared to only 9% (3) of women referred without a voucher.
- » 29% (28) of those receiving vouchers were still quit at 35 weeks compared to none of those not receiving vouchers.

An evaluation of the views and experiences of local parents found that the majority of interviewees approved of the incentive scheme, which has been particularly successful in tackling inequalities by achieving good quit rates in the bottom two deprivation deciles. Service providers value it highly because it enables them to offer pregnant women something positive and helpful alongside standard care. Since the scheme has been in place, South Tyneside's SATOD rate has dropped by almost a third, from 19.9% in 2017/18 to 13.9% in 2019/20.⁸⁷

See also:

- » Smoking in Pregnancy Challenge Group. [Evidence into practice: Supporting smokefree pregnancies through incentive schemes](#). 2019
- » Smoking in Pregnancy Challenge Group. [Evidence into Practice: Supporting partners to quit smoking](#). 2020

Recommendations: Tackling smoking in high prevalence communities

- » Additional investment to reduce rates of smoking in pregnancy should be greater in areas with the highest rates of SATOD. This should be in addition to existing funding for the NHS Long Term Plan.
- » ICSs should work with LMSs to ensure that there is a system-wide pathway to support women and communities before, during, and after pregnancy. This high-level plan should inform local action to address smoking before pregnancy and postnatally, in addition to the pregnancy pathway.
- » The 2021 Tobacco Control Plan should include a commitment to support and evaluate pathfinder areas for interventions to address high rates of relapse to smoking postnatally, and smoking among fathers, partners and other high prevalence groups and communities.
- » Using evidence of best practice and local examples, the Government should introduce a national incentive scheme focused on supporting women in high prevalence communities to quit smoking. The Government should work with localities to ensure that incentives are implemented alongside an evidence-based stop smoking pathway for pregnant women.

7. Using nicotine in pregnancy

Key points

- » Efforts to maximise the use of nicotine to support quitting among pregnant women have been undermined by a widespread misconception that nicotine is responsible for the health harms of smoking
- » Health professionals are best placed to challenge misconceptions about nicotine and educate pregnant women about the safety of Nicotine Replacement Therapy during pregnancy
- » E-cigarettes are by far the most popular products on the market for quitting smoking and, for some women, e-cigarettes may be an important part of the mix of support they need.

Smokers are more likely to quit successfully if they are supported to consistently access enough nicotine to help manage their cravings during their quit attempt. Pregnant women should be supported with nicotine replacement therapy (NRT) to help them stop smoking for the duration of their pregnancy and postpartum.

NRT is a safe form of treatment during pregnancy and widely prescribed for smoking cessation in the UK.⁸⁸ While it is nicotine that makes tobacco so addictive, nicotine is relatively harmless on its own and is significantly less addictive when delivered through NRT, as opposed to through smoking.⁸⁹ A recent Cochrane review of the efficacy and safety of NRT during pregnancy found no evidence that NRT during pregnancy is harmful, although further research is required.⁹⁰

There is also a role for other non-tobacco nicotine-containing products in supporting women to remain smokefree. E-cigarettes are by far the most popular consumer products on the market for quitting smoking. For some women, e-cigarettes may be an important part of the mix of support they need to quit or may offer an accessible alternative for women who do not wish to access formal support.

Nicotine Replacement Therapy

Efforts to maximise the use of nicotine to support quitting among pregnant women have been undermined by a widespread misconception that nicotine is responsible for the health harms of smoking, and concern among both pregnant women and professionals that the use of nicotine could be risky for the development of the baby.^{88 91 92} Findings from the annual Smokefree GB survey carried out by ASH show that public understanding of the relative risk of NRT compared to smoking is poor, particularly among smokers.⁹³ In 2020, more than a third (34%) of smokers said that they did not know how harmful NRT is compared to smoking and only 34% correctly identified NRT as being much less harmful than smoking. The proportion of smokers who think that NRT is less harmful than smoking has decreased from 22% in 2016 to 17% in 2020. As a result, it is possible that misunderstandings about nicotine are reducing uptake of NRT and leading some women who do use NRT not to use an adequate dose to address their cravings.

Health professionals are best placed to challenge misconceptions about nicotine and advise pregnant women about the safety of NRT use during pregnancy. Local commissioners should prioritise training on NRT for health professionals to ensure that they have the confidence and knowledge to deliver advice to pregnant women.

Although NRT combined with behavioural support is proven to be effective at increasing smoking cessation rates in the general population, the evidence regarding its effectiveness for pregnant women is less certain and further research is needed.⁹⁰ This is partly due to low adherence to NRT among pregnant women and faster metabolism of nicotine during pregnancy, leading to stronger nicotine cravings. Pregnant women should be encouraged to use NRT for the full 12-week recommended duration and to discuss with their maternity care provider or stop smoking practitioner any concerns or difficulties they may have with using the medication. Additional research is needed on which types and doses of NRT are the most effective in helping pregnant smokers quit.⁹⁴

A handful (6%) of stop smoking services and a quarter (23%) of GPs do not currently offer any NRT to smokers, meaning that pregnant women, new-mums, and their partners/household members have no access to NRT on prescription.¹³ Similarly, NREADY survey data shows that a third of NHS trusts with a stop smoking offer for pregnant women report not having a budget for NRT.¹⁵ NRT on prescription has been shown to improve quit rates in the general population, particularly when combined with behavioural support, whereas NRT purchased over the counter has not.⁹⁵ This is likely due to the support and advice people receive when they are prescribed NRT (on how much to use etc.) as well as the increased perceived importance of medication which is prescribed rather than simply recommended.

E-cigarettes

Electronic cigarettes (e-cigarettes) are currently the most popular aid to quitting smoking in England.⁹⁶ Evidence shows that e-cigarettes are considerably less harmful than smoking, though not completely risk-free.^{97 98} According to the findings of a recent Cochrane review, nicotine-containing e-cigarettes are approximately 70% more effective in supporting smokers to quit successfully than NRT.⁹⁹

There are currently no e-cigarettes with a medicinal licence available on the UK market, meaning they cannot be prescribed by GPs or other healthcare professionals. Very little research exists regarding the safety and efficacy of using e-cigarettes (vaping) during pregnancy for smoking cessation, however evidence from adult smokers in general suggests that they are likely to be significantly less harmful to a pregnant woman and her baby than continuing to smoke. A randomised control trial (RCT) looking at the safety and efficacy of e-cigs vs patches in helping pregnant smokers quit is due to report in mid-2021. Further research is needed in this area.

Attempts to utilise e-cigarettes to support pregnant women to quit smoking are hindered by a lack of knowledge about the relative safety of vaping compared to smoking among health professionals and service users. Like with NRT, pregnant women report being concerned about e-cigarette safety and nicotine dependence and perceive a social stigma around vaping during pregnancy.^{91,100} One survey of stop smoking services identified a range of attitudes to vaping among service providers, with some supporting vaping and others saying that vaping during pregnancy goes against medical advice. Stop smoking service managers cite the lack of a licensed product as a barrier to issuing or recommending vaping products as a quitting aid and highlight scepticism towards national guidance on vaping among local commissioners.^{101 102}

Case study: Using e-cigarettes to improve engagement with pregnant smokers in Bath and North East Somerset

In Bath and North East Somerset (BathNES), the Health in Pregnancy Service (HIPS) trialled the provision of free 'e-burn' e-cigarettes to pregnant smokers to improve engagement with the service. Following a 6-month pilot which concluded in June 2019, the scheme was implemented across BathNES and Wiltshire. This work is funded by the Local Maternity System.

The e-cigarette offer is universal and does not have any eligibility criteria – the smoking status is recorded at the booking appointment and followed up at each subsequent appointment. Pregnant women are provided with a minimum of 2 e-cigarettes per-week, with the option to give the second one to their partner if they want to quit together. Although not included in the number of e-cigarettes provided for the service, the offer can also be extended to partners if they express an interest in quitting.

The HIPS also offer e-cigarette starter packs to smokers in both the community and hospital settings and have found that during this time of both health and financial uncertainty, this service has proved useful and effective in helping the most vulnerable residents stay smokefree.

Due to COVID-19 the HIPS has had to withdraw from face-to-face appointments and has instead been offering antenatal appointments via video or telephone. To ensure that pregnant smokers received consistent support throughout the pandemic, they offered a mailout service which posts the e-burns out to the pregnant smokers. This small adaptation has ensured continuity of the service and retained the engagement of smokers during this challenging time. Initial outcomes from the scheme have included:

- » 4.8% increase in the number of smoking pregnant women accepting at least 1 visit after being contacted by the HIPS.
- » 2.4% increase in the number of quits (self-report).
- » 5.2% increase in the number of CO validated quits – from those accepting at least 1 visit.
- » The e-burns are much cheaper than NRT, with 4 weeks of e-burn support (consisting of 2 e-burns p/w) costing £15.60, compared to £100 for 4 weeks of NRT provision (patches and inhalator).

See also:

- » Smoking in Pregnancy Challenge Group. [Use of electronic cigarettes before, during and after pregnancy: A guide for maternity and other healthcare professionals](#). 2019
- » Hartmann-Boyce J et al. [Electronic cigarettes for smoking cessation](#). Cochrane database of systematic reviews. October 2020.
- » ASH Factsheet: [Use of e-cigarettes among adults in Great Britain](#). 2020.
- » PHE. [Vaping in England: evidence update March 2020](#)

Recommendations: Using nicotine in pregnancy

- » ICSs should work with LMSs to review the current level of training on NRT use during pregnancy and recommend that all relevant maternity practitioners undertake training so that staff are equipped to advise pregnant smokers about the safety and efficacy of NRT. For example, NCSCT/e-LfH e-learning on delivering brief advice.
- » ICSs should work with LMSs and local authorities to identify the NRT offer locally and ensure that pregnant women and their partners can access 12 weeks of dual-form NRT on prescription via maternity services, stop smoking services, or primary care. This offer should be extended postnatally.
- » ICSs should work with LMSs and local authorities to ensure that that pregnant women are supported to use e-cigarettes if that is their preferred way to quit.

8. Data collection

Key points

- » Despite some progress, there is still significant room for improvement with regards to how data is collected and utilised to facilitate the delivery of stop smoking support where it is most needed.
- » There are major limitations with the use of SATOD as the measure for smoking in pregnancy.
- » Shifting to recording smoking status at 36 weeks is likely to provide a more accurate picture of maternal smoking than SATOD data, and thus should provide a new and more reliable benchmark for NHSE to track national progress.

Good data collection and sharing are key to securing effective pathways for pregnant women and monitoring the overall performance of the system. Since the previous Challenge Group report in 2018, there has been some progress in the recording of smoking status during pregnancy, with smoking status at time of booking (SATOB) recorded for 92.6% of pregnant women in 2018/19, having previously not been published for local geographies. The publication of Saving Babies' Lives Care Bundle V2,⁴² with the welcome commitment to CO monitor all women at 36 weeks, provides an additional source of data for trusts and LMSs to monitor the smoking rates of women in their care. However, there is still significant room for improvement with opportunities to better utilise data to facilitate the delivery of stop smoking support where it is most needed. Additionally, the suspension of CO monitoring during the COVID-19 pandemic is likely to have delayed the implementation of CO monitoring at 36 weeks.

The third edition of the Clinical Negligence Scheme for Trusts (CNST), which incentivises the implementation of maternity safety actions, requires trusts to record the CO measurement of women at booking and 36 weeks on the MSDS.¹⁰³ However, compliance is partially dependent on whether trust IT systems allow staff to input CO measurements and whether data entry fields are mandatory, with significant variation in approaches to data collection across maternity services.

Building links between maternity services and stop smoking services

There are significant challenges with data sharing between maternity services and community stop smoking services, with maternity staff often left with no way of knowing whether a pregnant woman has been referred to a local stop smoking service, whether they have attended that referral, whether they have quit and for how long, or whether they have relapsed. This makes it much more challenging for maternity services to see what impact they are having on smoking in pregnancy rates and creates a considerable administrative burden for maternity staff who have to repeatedly ascertain women's quit status across multiple appointments.

These challenges are highlighted by NREADY survey data showing that 40% (12 of 30) of NHS trusts with a stop smoking offer for pregnant women were unable to say how many women set a quit date after receiving support from the trust. The most common reason provided was a lack of access to data on quit outcomes, with some respondents saying they were unable to obtain outcome data from the service provider. This is compounded by a lack of consistency in the database software

used to record quits, with trusts using a mixture of local systems, excel spreadsheets, bespoke systems, and patient care notes.¹⁵

In response to these challenges, Health Innovation Manchester (HInM) and Greater Manchester Health and Social Care (GMHSC) Partnership have launched a digital platform to reduce the administrative burden on midwives and provide improved performance management. This platform digitises the Greater Manchester Smokefree Pregnancy Programme pathway for specialist midwives delivering care and support to pregnant smokers. The platform combines all the information about a pregnant woman's quitting progress including their CO reading throughout pregnancy and on referral, quit date, referral date, gestation at referral, and how quickly the stop smoking service made contact. This allows local commissioners to view data on various outcomes and indicators, enabling better performance management and monitoring. It also enables better identification of key population groups, geographies, localities, and staff groups where there is a need for targeted intervention and support.

Recording smoking status during pregnancy

While SATOD certainly needs to be maintained until there is a viable alternative, ASH and the Challenge Group have several concerns about the use of SATOD as the measure for smoking in pregnancy. Collecting data during delivery is imperfect. It can be a poor time to ask about smoking, particularly where there have been complications during the birth.

Despite efforts to improve the consistency of data at the time of delivery, there is still significant variation in the quality and comparability of SATOD data across the country. This can be partly attributed to a lack of clinical guidance on *how* and *when* to identify and record smoking status at the time of delivery, with NHS trusts and CCGs free to take their own approach. NHS guidance states that SATOD is "self-reported by the woman and therefore may be susceptible to "satisficing" where the woman is tempted to give an answer which is more socially acceptable, i.e. to say she is a non-smoker."¹⁰⁴

Recording smoking status at 36 weeks

The Saving Babies' Lives Care Bundle v2 recommends carbon monoxide (CO) monitoring all women at 36 weeks, at the booking appointment and throughout pregnancy. CO monitoring at 36 weeks enables maternity services to plan for a smokefree birth, connect women with stop smoking support, and provide information about possible increased risks of smoking during and directly after labour, such as wound healing.

ASH and the Challenge Group recommend making smoking status at 36 weeks the official measure for smoking during pregnancy. The use of CO verification rather than self-report means that it is likely to provide a more accurate picture of maternal smoking than SATOD data, and thus should provide a new and more reliable benchmark for NHSE to track national progress. A key measure of performance should be the number of women smoking at booking who quit by 36 weeks. For women who deliver prior to 36 weeks their smoking status at the time of delivery can be used instead.

The move to recording maternal smoking at 36 weeks should be supported by the introduction of mandatory training for all maternity staff on the use of CO monitors and the delivery of very brief advice, as well as a review of the availability of CO monitors in maternity settings.

This shift does not mean that SATOD should be discarded. The collection of SATOD should be used as an opportunity to identify women who have relapsed to smoking between 36 weeks and delivery. Women who have relapsed should be offered support and medication to help them quit postnatally. This needs to be supported by standardised guidance on how and when to record SATOD.

Recommendations: Data collection

- » NHSE and PHE should make smoking status at 36 weeks the official measure for smoking during pregnancy. This should be supported by a review of the availability of CO monitors in maternity settings. For women who deliver prior to 36 weeks their smoking status at delivery can be used instead. The collection of SATOD data should be maintained.
- » NHSE and PHE should develop standardised national guidance on how and when to record SATOD.
- » PHE should establish a new 'smoking cessation during pregnancy' indicator to capture the number of women recorded as smokers at their booking appointment who quit by delivery. This would provide a clearer measure of how effectively women are being supported to quit.
- » NHSE and PHE should mandate the collection of data on whether pregnant women are exposed to secondhand smoke in the home.
- » PHE should recommend that information about exposure to secondhand smoke in the home in the early years is collected in a standardised way by health visitors at a child's mandated reviews.
- » As part of implementing the smoking in pregnancy components of the NHS Long Term Plan, NHSE & PHE should establish a working group to address the challenges around data collection and data sharing. Key objectives should include:
 - Identifying a practical way of sharing patient data between stop smoking services, maternity services, and health visiting services. This should include data on referrals, smoking status, and quit status. Ongoing work to implement Digital Maternity Records could provide one way to enable better data sharing across different systems and clinical settings.
 - Publishing combined data showing the numbers of women receiving stop smoking support within NHS services and local authorities and the outcomes from that support. Support provided by the NHS is not currently captured in stop smoking service returns.
 - Identifying a way of tracking key indicators throughout and beyond pregnancy to better evaluate how effective localities are at supporting pregnant women to quit smoking and preventing relapse.
 - Ensuring that local data capture systems are consistent and allow the collection of nationally mandated data points.

9. Building back better after COVID-19

Key points

- » Smoking is a leading modifiable risk factor for health conditions including heart disease, respiratory disease and diabetes which have exacerbated the impact of COVID-19 in poorer communities
- » The COVID-19 pandemic has significantly disrupted the provision of maternity care and stop smoking support for pregnant women
- » The return to more normal NHS delivery during 2021 will hopefully enable a renewed focus on Element 1 of the Saving Babies Lives Care Bundle
- » There are likely to be significant challenges associated with reintroducing and embedding CO monitoring in routine clinical practice
- » The remote support offered by stop smoking services during the pandemic could be more effective for engaging some pregnant women than face-to-face support due to the stigma associated with smoking during pregnancy.

COVID-19 and smoking

The pandemic makes action to reduce smoking prevalence all the more urgent. Smoking is a leading modifiable risk factor for health conditions including heart disease, respiratory disease and diabetes which have been exacerbating the impact of COVID-19 in poorer communities. As a precautionary measure, the government has classed pregnant women as a group at risk of severe illness with COVID-19.

The COVID-19 pandemic has significantly disrupted the provision of maternity care and stop smoking support for pregnant women, with CO monitoring and face-to-face stop smoking support paused between March and November 2020. Longstanding staffing shortages in midwifery and health visiting services have been exacerbated due to staff being redeployed to deal with COVID-19 or being forced to self-isolate, with over three-quarters of midwives saying that current staffing levels are unsafe.^{105 106} The impact of these challenges on quit rates among pregnant women and new mums is unclear, however some maternity services have reported having difficulties engaging parents in conversations about smoking.

There is some evidence that households with children saw an increase in exposure to secondhand smoke. Data from the YouGov Covid Tracker analysed by ASH found that 9% of non-smokers in a home with a child under-18 said they were more exposed to secondhand smoke during the first lockdown. Among smokers with a child under-18 in the home, 10% reported they were smoking more inside.

Despite these challenges, stop smoking service data from April to June 2020 showed a 25% increase in the number of pregnant women setting quit dates and higher quit success rates (self-reported), compared to the same period in 2019 (49% compared to 43% in 2019).¹⁰⁷ SATOD rates also declined during this period, with just under 10% of women recorded as smoking at the time of delivery in the first two quarters of 2020/21, compared to an average of 10.4% for the previous

year.¹⁰⁸ *Note: NHS Digital has urged caution when interpreting data collected during the COVID-19 period*

This corresponds with an increase in the number of smokers making quit attempts between 2019 and 2020 and with quit success rates at a record high of 22.3% according to University College London's Smoking Toolkit Study (STS).¹⁰⁹ The STS recorded the highest quit success rate for 18-24 year olds since 2007, with 22.7% of those trying to quit succeeding – a majority of whom will have done so since COVID-19 hit the UK.¹⁰⁹ This finding is backed up by analysis of the YouGov COVID-19 Tracker by ASH, which found that during the first lockdown (13th April – 5th July) the quit rate among 16-29 year olds was higher than for any other age group and more than double the quit rate of those aged over 50.¹¹⁰

However, across the same period, the STS has also identified a concurrent increase in the number of young people reporting that they have ever smoked and a high current smoking prevalence. It finds that a third of 18-24 year olds now report having ever smoked, a level last seen a decade ago.¹⁰⁹ This is a moment, therefore, of both threat and opportunity as young smokers are rapidly switching between smoking and quitting behaviours. Given that more affluent smokers are likely to have greater success at quitting, there is a particular risk to the population of younger, more deprived women who most likely to smoke in pregnancy.

CO monitoring

There are two important points in the system where CO monitoring is deployed to support pregnant women in normal times:

1. As a diagnostic tool in maternity appointments to assess a women's exposure to CO and identify a way of managing that risk – generally through an opt out referral to smoking cessation services.
2. To assess progress of smokers making a quit attempt and validate quit success.

The suspension of CO monitoring came at a time when maternity services were making real progress in implementing the diagnostic element of CO monitoring. The role of the Saving Babies Lives Care Bundle has been key in this. However, implementation was far from universal with progress still variable around the country. The return to more normal NHS delivery during 2021 will hopefully allow a renewed focus on the Care Bundle. Within this, particular attention must be paid to Element 1 and the challenges of reinstating CO monitoring after an 8 month pause.

There has been a gradual decline in the use of CO monitors to verify quit attempts in stop smoking services which has been a cause for concern given that this is a marker of quality for service delivery (See Figure 6). The COVID-19 pandemic has led to widespread implementation of remote service delivery e.g. over the phone or through video conferencing. The ASH/CRUK local report finds that stop smoking services believe this remote service model is popular with clients and is likely to endure in some form post-COVID.¹⁴ This will create new challenges in assessing service quality for pregnant women. For instance, the additional stigma of smoking in pregnancy risks women misreporting successful quits which cannot be verified through CO monitoring and therefore missing out on support. Alternative verification or other service delivery methods therefore need to be explored to ensure service quality can be maintained.

As part of their remote support offer, maternity services in Greater Manchester have been providing personal CO monitors which can be used at home by individual service users without needing an advisor to be present. The person uses the device which sends an email to their advisor via an associated application (app), then a virtual and remote consultation occurs with their adviser to discuss their results, offer behavioural support, and plan pharmacotherapy. Initial insights from the scheme show that the personal CO monitors have been effective for engaging pregnant women as part of a wider package of remote support.

Lessons from COVID-19

The impact of the pandemic and the first lockdown on smoking behaviours still needs to be fully assessed, as does the impact of subsequent lockdowns. There are ongoing risks to:

- » Smoking behaviour with some populations showing evidence of higher levels of smoking
- » Service delivery in the community and in maternity settings
- » Wider role of health and other services in engaging with smokers and supporting smoking cessation.

What is evident is that there has been an awakening of public understanding about risks to health and a widespread desire to reduce those risks. Services need to meet the challenge and make the most of this 'teachable moment'. This is difficult at a time when health services are under massive pressures but if this opportunity can be realised it will help to boost progress towards realising the vision of a smokefree society by 2030.

Recommendations: Building back better after COVID-19

- » Priority should be given to reinstating Element 1 of the Saving Babies Lives Care Bundle as we emerge from the impact of the pandemic.
- » Localities should review and monitor populations which are more vulnerable to smoking and smoking during pregnancy as we emerge from the pandemic to ensure inequalities are not being further exacerbated. Communities experiencing increases in smoking prevalence should be offered stop smoking support and tailored interventions.
- » NIHR should evaluate the remote support offered by stop smoking services and maternity services during the pandemic to identify whether this support is effective for engaging pregnant women. NIHR should also evaluate current interventions for preventing relapse to smoking postnatally and reducing smoking rates among fathers and partners.
- » Local practice should be reviewed in line with new NICE guidance on smoking due to be published later in 2021.

Appendices

Appendix 1: Summary of smoking in pregnancy audits carried out by NHS trusts

Barnsley Hospital NHS Foundation Trust

Design: The audit tracked 10 smokers and 10 non-smokers and calculated approximate costings for antenatal appointments, outpatient appointments, overnight admissions, ultrasound scans and length of stay postnatally.

Key findings:

- » Women who smoked were more than twice as likely (9/10) to have a previous significant obstetric history, compared to non-smokers (4/10)
- » Women who smoked attended more antenatal appointments (148) than non-smokers (110). This includes 76 hospital appointments for the smokers compared to only 28 hospital appointments for the non-smokers.
- » Women who smoked had almost three times as many attendances (33) to the Antenatal Day Unit (ANDU) compared to non-smokers (13)
- » Women who smoked had almost twice as many ultrasound scans (62) as non-smokers (37)
- » Women who smoked were twice as likely to have complications during labour (6/10) compared to the non-smokers (3/10)
- » Babies born to mothers who smoked had an average weight of 2799 grams compared to 3371 grams for the non-smokers. 3 of the babies born to women who smoked were classed as small for gestational age compared to 1 for the non-smokers.
- » Women who smoked were far more likely (7/10) to live in a household where other people smoked, compared to non-smokers (0/10)
- » Half of the women who smoked were from the most deprived quintile compared to none of the non-smokers.
- » The 10 women who smoked cost the maternity unit approximately £46,820 compared to £13,548 for the 10 non-smoking women. This includes approximate costings for antenatal appointments, outpatient appointments, overnight admissions, ultrasound scans and length of stay postnatally. This does not include the cost of treating complications during labour or postnatally, or the cost of prescription drugs such as Daltaparin and Clexane.

Sherwood Forest Hospitals NHS Foundation Trust

Design: The audit looked specifically at whether smokers have a higher incidence of complications during and after pregnancy compared to non-smokers. The audit included 25 non-smokers and 25 smokers, who had given birth at Sherwood and used data collated from review notes.

Key findings:

- » The smoking group had a much higher prior incidence of miscarriage compared to the non-smokers (17 vs 6)
- » Smokers had an average of 3 more antenatal contacts per woman than non-smokers
- » Smokers are 3 times more likely to have antenatal complication
- » Smokers are 5.5 times more likely to be induced
- » Smokers are almost twice as likely to have complications in labour
- » Smokers are 3 times more likely to have a baby in the 10th centile
- » Non-smokers are 3.6 times more likely to breastfeed

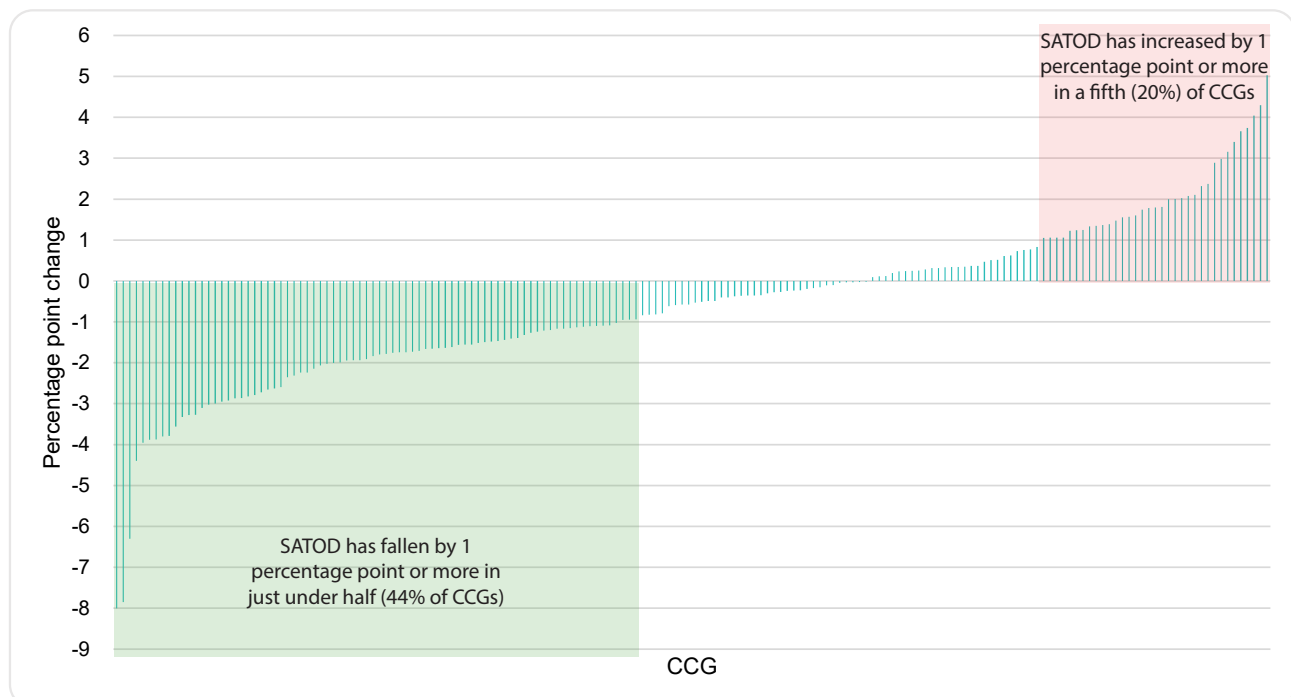
Poole Hospital NHS Foundation Trust

Design: The audit tracked 34 smokers and 34 non-smokers throughout their pregnancy and recorded a range of key indicators including obstetric history, antenatal appointments, scans, and complications during labour.

Key findings:

- Smokers cost the Trust £737.88 extra per patient
- Smokers had higher rates of previous significant obstetric history, particularly for miscarriage and small for gestational age babies
- Smokers were much more likely to have smoking partners
- Smokers had over twice as many antenatal appointments
- Smokers had much higher number of DNA (did not attend) appointments (includes all types of appointment) compared to non-smokers
- Smokers had much higher number of ultrasound scans
- Smokers had a lower average gestation at delivery, smaller babies, and a longer postnatal stay

Appendix 2: Change in CCG SATOD rates between 2015/16 and 2019/20, by CCG



Only includes CCGs in existence from 2015/16 to 2019/20 (176 out of 191)

References

1. Smoking in Pregnancy Challenge Group. [Smoking in Pregnancy Challenge Group response to Advancing our Health: Prevention in the 2020s](#). November 2019
2. Royal College of Physicians. [Hiding in Plain Sight: Treating tobacco dependency in the NHS](#). 2018
3. DHSC. [Advancing our health: prevention in the 2020s](#). July 2019
4. DHSC Policy paper. [The future of public health: the National Institute for Health Protection and other public health functions](#). Published 15 September 2020
5. Department of Health and Social Care. [Towards a smoke-free generation: a tobacco control plan for England](#). July 2017
6. The Lullaby Trust. [Impact of smoking on future rates of stillbirth, neonatal and infant mortality and poor birth outcomes in England](#). 2018.
7. NHS England and NHS Improvement. [Better Births Four Years On: A review of progress](#). March 2020.
8. ONS. [Child and infant mortality in England and Wales: 2018. Halving stillbirth and neonatal mortality rates by 2025](#).
9. NHS. [Saving Babies' Lives Care Bundle](#).
10. RCM. [Maternity Transformation in England](#).
11. NHS. [The NHS Long Term Plan](#). January 2019
12. [The CURE Project: curing tobacco addiction in Greater Manchester](#).
13. ASH & CRUK. [Many ways forward: Stop smoking services and tobacco control work in English local authorities](#)., 2019.
14. ASH & CRUK. [Stepping up: the response of stop smoking services in England to the COVID-19 pandemic](#). January 2021
15. Findings from a survey of specialist stop smoking in pregnancy support provided by NHS trusts and local authorities. Survey carried out by ASH and the Smoking in Pregnancy research group at the University of Nottingham as part of the Nicotine Replacement Effectiveness and Delivery in Pregnancy (NREADY) programme. 95 NHS trusts and 99 local authorities responded to the survey. Fieldwork was carried out between July and December 2020.
16. Smoking in Pregnancy Challenge Group. [Local Maternity Systems: Briefings for Local Maternity Systems \(December 2020\)](#)
17. Cabinet Office and DHSC. [Advancing our health: prevention in the 2020s - consultation document](#). July 2019.
18. Hansard. [Written question UIN 122663](#), tabled on 30 November 2020. Answered on 9 December 2020.
19. ASH. [Roadmap to a Smokefree 2030](#). January 2020
20. ASH and Breathe 2025. [Response to Advancing our health: prevention in the 2020s](#). October 2019.
21. ASH. [The local costs of tobacco. ASH Ready Reckoner 2019 edition](#).
22. Branston, J. R. and Gilmore, A. [The extreme profitability of the UK tobacco market and the rationale for a new tobacco levy](#). University of Bath. 2015.
23. ASH smokefree England survey 2019. Total sample size in 2019 for England was 10338 adults. Fieldwork was undertaken between 12th February 2019 and 10th March 2019. The surveys are carried out online and the figures have been weighted and are representative of all English adults (aged 18+)
24. Langley T, McNeill A, Lewis S et al. [The impact of media campaigns on smoking cessation activity: a structural vector autoregression analysis](#). *Addiction*. 2012 Nov;107(11):2043-50.
25. Sims M, Salway R, Langley T et al. [Effectiveness of mass media campaigns to change tobacco use in England: a population-based cross-sectional study](#). *Addiction*. 2014 Jun;109(6):986-94.
26. Hansard. [Written question UIN 35653](#), tabled on 26 April 2016. Answered on 3 May 2016.
27. Hansard. [Written question UIN 66027](#), tabled on 29 June 2020. Answered on 13 July 2020.

28. ASH. [Stoptober: ASH calls for more mass media campaigns to help smokers to quit](#). September 2016
29. Public Health England. [Stoptober 2019: Campaign Evaluation](#). 2020
30. Public Health England. [Stoptober 2017: Campaign Evaluation](#). 2018
31. Fresh 'Don't Wait' campaign evaluation based on Bluegrass independent online survey of 793 adults in NE and NC
32. 'Don't Wait' campaign evaluation undertaken by Bluegrass. Greater Manchester. July 2020
33. NHS Digital. [National Maternity Statistics 2017-18](#). 2018.
34. PHE. [Smoking prevalence in young adults aged 18 to 34 years](#). July 2020
35. Campaign for Tobacco Free Kids. [Raising the tobacco age to 21](#). 2018.
36. Analysis of Smoking Toolkit Study data for ASH. Monthly household surveys of representative samples of approximately 1800 adults (16+ years old) in England. University College London. [www.smokinginengland.info](#)
37. Institute of Medicine. [Public health implications of raising the minimum age of legal access to tobacco products](#). Washington, DC: The National Academies Press. 2015
38. Millett C, Lee JT, Gibbons DC, Glantz SA. [Increasing the age for the legal purchase of tobacco in England: impacts on socio-economic disparities in youth smoking](#). Thorax. 2011;66(10):862-865.
39. Widdows K, Roberts SA, Camacho EM, Heazell AEP. [Evaluation of the implementation of the Saving Babies' Lives Care Bundle in early adopter NHS Trusts in England](#). Maternal and Fetal Health Research Centre, University of Manchester, Manchester, UK. 2018.
40. Jones S, Hamilton S, Bell R, Araújo-Soares V, Glinianaia S, Milne E. [What helped and hindered implementation of an intervention package to reduce smoking in pregnancy: process evaluation guided by normalization process theory](#). BMC Health Services Research. 2019
41. NICE. [Guideline \[PH26\] Smoking: stopping in pregnancy and after childbirth](#). June 2018
42. NHS England. [Saving Babies' Lives Version Two: A care bundle for reducing perinatal mortality](#). March 2019
43. Health Foundation. [The public health grant has been increased but is still too low](#). March 2020
44. NHS Digital. [Statistics on NHS Stop Smoking Services in England April 2015 to March 2016](#). August 2016
45. NHS Digital. [Statistics on NHS Stop Smoking Services in England April 2019 to March 2020](#). November 2020
46. NICE. [Guideline \[NG92\] Stop smoking interventions and services](#). March 2018
47. NHS. [Targeted and enhanced midwifery-led continuity of carer](#).
48. Sandall J, Soltani H, Gates S, Shennan A, Devane D. [Midwife-led continuity models versus other models of care for childbearing women](#). Cochrane Database of Systematic Reviews 2016, Issue 4. Art. No.: CD004667
49. Homer CS, Leap N, Edwards N, Sandall J. [Midwifery continuity of carer in an area of high socio-economic disadvantage in London: a retrospective analysis of Albany Midwifery Practice outcomes using routine data \(1997-2009\)](#). Midwifery. 2017 May 1;48:1-0.
50. NHS England & NHS Improvement. [Better Births Four Years On: A review of progress](#). March 2020
51. Sanders J, Hunter B, Warren L. [A wall of information? Exploring the public health component of maternity care in England](#). Midwifery. 2016 Mar 1;34:253-60.
52. PHE. [Local tobacco control profiles: Smoking in early pregnancy](#). England, 2018/19
53. NICE. [Clinical guideline \[CG110\] Pregnancy and complex social factors: a model for service provision for pregnant women with complex social factors](#). September 2010
54. Hyndman K, Thomas RE, Schira HR, Bradley J, Chachula K, Patterson SK, Compton SM. [The Effectiveness of Tobacco Dependence Education in Health Professional Students' Practice: A Systematic Review and Meta-Analysis of Randomized Controlled Trials](#). International journal of environmental research and public health. 2019 Jan;16(21):4158.
55. ASH. [Smokefree Skills: An assessment of maternity workforce training](#). July 2017
56. Nursing & Midwifery Council. [Standards of proficiency for midwives](#). November 2019
57. Royal College of Paediatrics and Child Health (2020) [State of Child Health](#). London: RCPCH.
58. Public Health England. [Smoking prevalence in young adults aged 18 to 34 years](#). July 2020.
59. Public Health England. [Local Tobacco Control Profiles. Smoking in early pregnancy, England, 2018/19](#).
60. NHS Digital. [NHS Maternity Statistics, England 2018-19 \[PAS\]](#). October 2019.
61. PHE. [Making the Case for Preconception Care: Planning and preparation for pregnancy to improve maternal and child health outcomes](#). 2018.
62. ONS. [Child and infant mortality in England and Wales: 2018](#)
63. Office for National Statistics. [2011 Census](#).
64. NHS Digital. [Statistics on smoking, England, 2019](#). July 2019

65. Office for National Statistics. [Ethnicity in England and Wales](#). 2011
66. World Health Organisation. [Global Health Observatory data repository: Prevalence of current tobacco use by country](#). 2018
67. Jones M, Lewis S, Parrott S, Wormall S, Coleman T. [Re-starting smoking in the postpartum period after receiving a smoking cessation intervention: a systematic review](#). *Addiction*. 2016 Jun;111(6):981-90. doi: 10.1111/add.13309. Epub 2016 Mar 16. PMID: 26990248; PMCID: PMC6680353.
68. Smoking in Pregnancy Challenge Group. [Review of the Challenge 2018](#)
69. Riaz M, Lewis S, Naughton F, Ussher M. [Predictors of smoking cessation during pregnancy: a systematic review and meta-analysis](#). *Addiction*. 2018 Apr;113(4):610-22.
70. NHS Digital. [Infant Feeding Survey](#). 2010
71. Nieuwenhuijsen MJ et al. [Environmental risk factors of pregnancy outcomes: a summary of recent meta-analyses of epidemiological studies](#). *Environ Health*. 2013 Jan 15;12:6. doi: 10.1186/1476-069X-12-6.
72. Hyland A, Piazza KM, Hovey KM, Ockene JK, Andrews CA, Rivard C, Wactawski-Wende J. [Associations of lifetime active and passive smoking with spontaneous abortion, stillbirth and tubal ectopic pregnancy: a cross-sectional analysis of historical data from the Women's Health Initiative](#). *Tobacco control*. 2015 Jul 1;24(4):328-35.
73. Jones, M., Lewis, S., Parrott, S., Wormall, S., & Coleman, T. [Re-starting smoking in the postpartum period after receiving a smoking cessation intervention: A systematic review](#). *Addiction*, 2016, 111(6), 981-990
74. FNP. [Helping pregnant women to stop smoking](#). October 2019
75. Public Health England. [Smoking prevalence in young adults aged 18 to 34 years](#). 2019
76. Office for National Statistics. [Smoking status and housing tenure, England and London, 2015 to 2017](#). 2018.
77. Shawe J, Patel D, Joy M, Howden B, Barrett G, Stephenson J. [Preparation for fatherhood: A survey of men's preconception health knowledge and behaviour in England](#). *PLoS one*. 2019;14(3).
78. Notley C, Gentry S, Livingstone-Banks J, Bauld L, Perera R, Hartmann-Boyce J. [Incentives for smoking cessation](#). *Cochrane Database of Systematic Reviews*. 2019(7).
79. McConnachie A., Haig C., Sinclair L., Bauld L., Tappin D. [Birth weight differences between those offered financial voucher incentives for verified smoking cessation and control participants enrolled in the Cessation in Pregnancy Incentives Trial \(CPIT\), employing an intuitive approach and a Complier Average Causal Effects \(CACE\) analysis](#). *Trials* 2017. 18:337
80. Tappin D, Bauld L, Purves D, Boyd K, Sinclair L, MacAskill S, et al. [Cessation in Pregnancy Incentives Trial \(CPIT\) team. Financial incentives for smoking cessation in pregnancy: randomised controlled trial](#). *BMJ* 2015; 350: h134
81. Tobacco Free Futures. [Achieving a smokefree pregnancy](#).
82. Chamberlain C, O'Mara-Eves A, Oliver S, Caird JR, Perlen SM, Eades SJ, Thomas J. [Psychosocial interventions for supporting women to stop smoking in pregnancy](#). *Cochrane Database of Systematic Reviews* 2013, Issue 10. Art. No.: CD001055
83. Greater Manchester Health and Social Care Partnership. [Making Smoking History: A tobacco free Greater Manchester](#). 2017.
84. Bell R et al. [Evaluation of a complex healthcare intervention to increase smoking cessation in pregnant women: interrupted time series analysis with economic evaluation](#). *Tobacco control*. 2018 Jan 1;27(1):90-8.
85. Smoking in Pregnancy Challenge Group. [Evidence into practice: supporting partners to quit smoking](#). March 2020
86. PHE. [Local tobacco control profiles: Smoking status at time of delivery, England](#)
87. PHE. [Local tobacco control profiles: Smoking status at time of delivery, England](#)
88. Public Health England (PHE) [Health matters: stopping smoking - what works?](#) 2019.
89. McNeill, A; Brose, L S; Calder, R; Bauld, L; Robson, D. [Evidence review of e-cigarettes and heated tobacco products 2018: A report commissioned by Public Health England](#). PHE. 2018
90. Claire R, Chamberlain C, Davey MA, Cooper SE, Berlin I, Leonardi Bee J, Coleman T. [Pharmacological interventions for promoting smoking cessation during pregnancy](#). *Cochrane Database of Systematic Reviews*. 2020(3).
91. Bowker K, Campbell KA, Coleman T, Lewis S, Naughton F, Cooper S. [Understanding pregnant smokers' adherence to nicotine replacement therapy during a quit attempt: a qualitative study](#). *Nicotine & Tobacco Research*. 2016 May 1;18(5):906-12.
92. Thomson R, McDaid L, Emery J, Phillips L, Naughton F, Cooper S, Dyas J, Coleman T. [Practitioners' Views on Nicotine Replacement ~Therapy in Pregnancy during Lapse and for Harm Reduction: A Qualitative Study](#). *International journal of environmental research and public health*. 2019 Jan;16(23):4791.
93. Action on Smoking and Health (ASH). [Fact Sheet: Use of e-cigarettes \(vapes\) among adults in Great Britain](#). October 2020.

94. Bowker K, Lewis S, Coleman T, Cooper S. [Changes in the rate of nicotine metabolism across pregnancy: A longitudinal study](#). *Addiction*. 2015;110:1827–1832. doi: 10.1111/add.13029.
95. Kotz D, Brown J, West R. [‘Real-world’ effectiveness of smoking cessation treatments: a population study](#). *Addiction*. 2014 Mar;109(3):491-9.
96. Smoking in England. [Latest Statistics](#). 2020.
97. McNeill A, Brose LS, Calder R, Bauld L, Robson D. [Evidence review of e-cigarettes and heated tobacco products 2018. A report commissioned by Public Health England](#). London: Public Health England. 2018 Feb;6.
98. Royal College of Physicians. [Nicotine without smoke: Tobacco harm reduction](#). London: RCP, 2016.
99. Hartmann-Boyce J, McRobbie H, Lindson N, Bullen C, Begh R, Theodoulou A, Notley C, Rigotti NA, Turner T, Butler AR, Hajek P. [Electronic cigarettes for smoking cessation](#). *Cochrane Database of Systematic Reviews* 2020, Issue 10. Art. No.: CD010216. DOI: 10.1002/14651858.CD010216.pub4.
100. Bowker, K., Orton, S., Cooper, S. et al. [Views on and experiences of electronic cigarettes: a qualitative study of women who are pregnant or have recently given birth](#). *BMC Pregnancy Childbirth* 18, 233 (2018). <https://doi.org/10.1186/s12884-018-1856-4>
101. Cooper, S., S. Orton, K.A. Campbell, M. Ussher, N. Coleman-Haynes, R. Whitmore, A. Dickinson, A. McEwen, S. Lewis, F. Naughton, K. Bowker, L. Sinclair, L. Bauld, and T. Coleman. [Attitudes to e-cigarettes and cessation support for pregnant women from English stop smoking services: a mixed methods study](#). *International Journal of Environmental Research and Public Health*, 2019. 16(1): p. 110.
102. McNeill, A., Brose, L.S., Calder, R., Bauld, L., and Robson, D. [Vaping in England: an evidence update including mental health and pregnancy, March 2020: a report commissioned by Public Health England](#). 2020. London: Public Health England.
103. NHS Resolution. [Maternity incentive scheme year three](#). October 2020
104. NHS Digital. [Data quality statement. Statistics on Women’s Smoking Status at Time of Delivery: England Quarter 4, 2019-20](#)
105. RCM. [Fears for maternity as staffing shortages hit safety and morale says RCM](#). November 2020
106. Topping, A. [Overstretched health visitors caring for up to 2,400 families each](#). *The Guardian*. October 2020
107. NHS Digital. [Statistics on NHS Stop Smoking Services in England April 2020 to June 2020](#). November 2020
108. NHS Digital. [Statistics on Women’s Smoking Status at Time of Delivery: England Quarter 2, 2020-21](#). November 2020
109. Smoking Toolkit Study. [Top-line findings on smoking in England from the Smoking Toolkit Study](#). Updated 13th November 2020.
110. ASH analysis of the YouGov COVID-19 Tracker. For more information on the YouGov COVID-19 Tracker see: <https://yougov.co.uk/topics/international/articles-reports/2020/03/17/YouGov-international-COVID-19-tracker>