CIGARETTE-RELATED LITTER

YEAR 1 EVALUATION REPORT

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KEEP BRITAIN TIDY.

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KEEP BRITAIN TIDY.

PROJECT BACKGROUND

THE PROBLEM

Cigarette-related litter, particularly the butt that remains after the cigarette smoking, is the world's most prevalent type of litter. An estimated 4.5 trillion butts are littered every year.

They are by far the most littered item in the UK; making up 66% of all items littered in England*, only one in eight cigarettes are binned when finished with - the other seven are littered (the average at sites where litter bins are present).**

These butts cost millions of pounds to pick up. Many of them are dropped within the environment and are not only a blight on our streets, beaches and parks but also a grave danger to wildlife and go on to pollute our watercourses and, ultimately, our oceans.

Cigarette butts do not biodegrade. They can take 14 years to break apart, seeping toxins into the earth that are proven to stunt plant growth and be toxic to aquatic life.

Cigarette butts can break apart into microplastics: consequently, cigarette litter has a huge environmental and financial impact.***

The correct disposal of cigarette butts is crucial.

Smokers' littering behaviour needs to change, but changing this ingrained and often subconscious act requires a wholescale cultural shift. This shift will take time and effort, but it is possible. This report details the first phase of an intensive, long-term programme of work to tackle cigarette-related litter, including a national behaviour change campaign underpinned by research and supported through practical interventions.

* Keep Britain Tidy National Litter Survey How Clean is England Leaflet 2019 2020.pdf (keepbritaintidy.org)
**Keep Britain Tidy; Litter Composition Analysis Summary Report March 2020 20200330 KBT Litter Composition Report - FINAL.pdf (keepbritaintidy.org)
***For full academic references please visit https://www.keepbritaintidy.org/smoking-related-litter

EXECUTIVE SUMMARY

BACKGROUND

In 2022, CleanStreets Community Interest Company (CIC) engaged the environmental charity Keep Britain Tidy to undertake an intensive programme of work to tackle cigarette-related litter, including a national behaviour change campaign underpinned by research and supported through practical interventions. We will make the findings open source as they become available.

2022 was year one of a multi-year programme of sustained activity to build a solid foundation for a reduction in littered butts, until such time as a comprehensive extended producer responsibility scheme is mandated.

CleanStreets CIC's grant has enabled Keep Britain Tidy to drive the first phase of an impactful, quality programme of research, innovation and campaigning instrumental in evidencing the first stages of a measurable reduction in cigarette butt littering.

To shift a subconscious behaviour across a nation requires an informed, integrated and sustained approach because it is deeply embedded in smokers' psychological cycles of craving and disgust. In addition, smokers are fundamentally resistant as a group to behaviour change messaging. That is the basis of this work programme.

Encouragingly, our first year results show that smokers' littering behaviour can change when the correct infrastructure or campaign collateral is present in the right place at the right time.

However, it is not always practical to have the right bins in the right place at the right time, making it harder for smokers to bin their butts. And, as expected, we still see a dip in smokers' correct behaviour and motivation when the behaviour change campaign is off-air.

Our results are encouraging, demonstrating that the work programme has started to break this ingrained littering behaviour and can improve the environment for everyone and everything in it. But this change requires a multi-level, long-term strategy to effect long-term national behavioural change.

THIS DOCUMENT

This document is a comprehensive review of all available outputs and findings from year one of the work programme. This version, 2.1, dated September 2023, contains the full and final findings, including those of the behaviour change interventions that started following the campaign launch in November 2022.

YEAR ONE OUTPUTS

- Major behaviour change campaign live across numerous channels, resulting in an evidenced behavioural shift in smokers.
- Secondary research report, Baseline Attitudinal Survey and National Litter Survey data captured, evaluated and published.
- Multiple interventions and research streams with extensive findings delivered. These will also direct year two of the work programme.
- Evaluation of the findings of year one and plan for year two of funded activity.

CAMPAIGN BRIEF AND DEVELOPMENT

THE BRIEF OUTLINE

The brief set the difficult challenge to shift the littering behaviours of a hard-to-influence audience - heavy smokers 35+, C2DE*. The campaign was to be ground-breaking, as while the health impacts of cigarettes are frequently publicised, little wide-scale public communication exists to date on the environmental harms.

As such, the campaign must adhere to the World Health Organisation Framework Convention on Tobacco Control guidelines and regulations from broadcasting approval bodies to ensure the messages about the environmental harms of cigarette-related litter landed without eliciting a craving response through the advertising.

RESEARCH OVERVIEW

The planning stage of the year one behaviour change campaign included two valuable sets of creative response research, vital for the campaign's development.

First, we recruited 300 smokers, who met our audience criteria, to a qualitative online platform. It set out to understand the messaging that resonated most effectively with them, which 'reasons to believe' are most powerful in eliciting behaviour change and the 'calls to action' deemed the most appropriate for the mass-reach media campaign.

With these findings, the creative agency developed three conceptualised creative routes for the year one behaviour change campaign.

We tested these routes qualitatively through individual and paired interviews with 21 smokers, assessing how each of the three creative routes performed in the following:

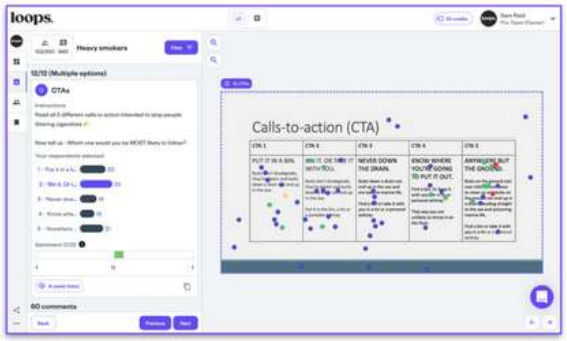
- Engaging and motivating the target audience to change their cigarette butt disposal behaviour.
- Impacting attitudes and behaviours relating to butt disposal.
- Affecting attitudes towards smoking per se, i.e. whether routes created any broader conscious or sub-conscious considerations around smoking (positively or negatively); and whether they created a craving response.

Another set of quantitative research tested the three proposed creative routes with 360 of our target smokers using the same online platform. It tested for memorability, whether they found it irritating, reported impact on littering behaviour, care for the environment and understanding of impact.

TIMINGS

July, August, and September 2022

QUANTITATIVE TESTING



* A market research term used to refer to the three lower social and economic groups in a society, sometimes also described as 'working class'.

CAMPAIGN BRIEF AND DEVELOPMENT

PRINCIPAL RESEARCH LEARNINGS

- Quantitative testing of the campaign territories showed that positive outperformed negative ones and elicited a strong sense of responsibility from smokers, particularly pride in the local community.

- Being direct and clear was important; 'tidiness' was easy to understand; myth-busting and humour are effective tools. Playing on 'small thing, big consequences' in the tactical execution would be most effective. However, defensive reactions are easily triggered, so a strategy must always be to address common excuses.

- Qualitative testing of the campaign routes showed that the portrayal from the cigarette's viewpoint was memorable. The idea that it is much bigger than they thought prompted a re-consideration of disposal behaviours, supported by the shocking time-lapse. The campaign needed to strike the right balance of impact on people, animals and the environment to ensure broad appeal.

- We felt that the tested script did get the idea across in a reasoned, balanced and fair way.

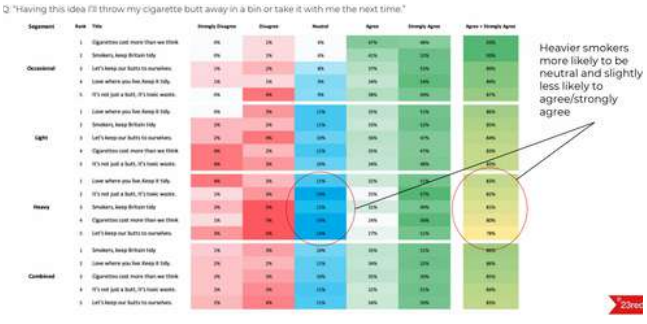
- The call to action provided strong motivation not to drop butts on the ground and both parts, 'bin it' and 'take it with you', fitted well.

- People were less likely to pass the blame to the council or cite lack of bins in their area for this route, which delivered the strongest sense of individual responsibility for their butts.

- Quantitative testing of the campaign routes showed a very strong preference (between twice and three times greater) among all the age groups except one for the 'Change Starts with You' concept, which we took as our preferred campaign route.

- Only the youngest age group (18-25) preferred another route, and that was around 7% preference. In addition, the 'Change Starts with You' route, averaged over all ages, ranked higher in prompting understanding of impacts, care for their environment and thinking twice about dropping cigarette butts than any of the other routes. Respondents found it the least irritating and, importantly, the least likely of all three routes to prompt a craving response.

TERRITORY TESTING



CAMPAIGN LAUNCH

'CHANGE STARTS WITH YOU' TV COMMERCIAL

CAMPAIGN LAUNCH

The campaign ‘Change Starts with You’ launched with an initial wave of outdoor advertising in November 2022. The posters’ role was to ‘myth bust’ the misconception demonstrated in our research that cigarette butts are biodegradable. These high-impact posters launched the campaign, running for three weeks in key cities with a particularly high smoker footfall: London, Manchester, Birmingham, Leeds and Derby.

We wrote to around 30,000 stakeholders, including government ministers, local authorities, corporate supporters, litter ambassadors, sister organisations and environmental bodies before the campaign launch. We also launched a webpage detailing the open source research behind the campaign.

The TV campaign followed the initial burst of outdoor advertising, going live on air in December 2022. We shot the TV campaign, built on the detailed research, from a cigarette butt’s viewpoint, educating the audience on the environmental harms from a littered butt over the course of its 14-year lifespan.

POSTER NEAR PARLIAMENT

CAMPAIGN LAUNCH

HIGH-IMPACT LANDSCAPE POSTER

In February 2023, the campaign deepened smokers' understanding of the environmental harms of cigarette butts by expanding across further media channels - radio, social, digital, podcast host stories and new outdoor advertising creative sites.

These channels added a new depth to the narrative. For example, podcasts presented five-minute conversational interviews with well-known hosts discussing the environmental harms with cigarette-related litter experts and ambassadors.

These comprehensive accounts helped engage our audience more deeply with the issue of cigarette-related litter.

We also refreshed the outdoor advertising for this stage of the campaign to fully align to the TV advertising, presenting it in 588 out-of-home advertising sites across 86 towns and cities in England.

CAMPAIGN TIMINGS

	NOV		DEC		JAN		FEB		MAR	
OUTDOOR POSTERS										
TV/VIDEO ON DEMAND										
RADIO										
SOCIAL										
PARTNERSHIP PODCASTS										

CAMPAIGN RECEPTION

SOCIAL CONTENT WITH LITTER AMBASSADORS

CAMPAIGN RECEPTION

‘Change Starts with You’ is a significant advertising campaign in Keep Britain Tidy’s history.

It received an overwhelmingly positive reception from our stakeholders. Environment Minister Rebecca Pow, Parliamentary Under Secretary of State at the Department for Environment, Food and Rural Affairs acknowledged this behaviour change campaign, highlighting its importance.

The reception from stakeholders has been matched by the wider public, who largely have noted the need and importance of this campaign and expressed a desire to engage and to access further resources.

CAMPAIGN PERFORMANCE

CAMPAIGN PERFORMANCE

We estimate that 39,230,000 individuals and 4,329,000 individual smokers across England have seen the campaign.

The latest data on number of smokers in England was 5.3 million*, so more than 80% of the audience saw the campaign through reach and targeting.

The campaign has already created shifts in our Key Performance Indicator (KPI) metrics across claimed behaviour, attitudinal shift, understanding and recall.

Most notably, we saw significant improvement in the understanding of the environmental harms of cigarette butts, surpassing our initial KPI.

KPIS

AREA	QUESTION	WAVE 1	WAVE 2	WAVE 3	TARGET
CLAIMED BEHAVIOUR	[Net any] claimed litter behaviour score across the three outside locations	35%	32%	34%	32%
ATTITUDINAL SHIFT	[Net any] strong disagreement score for the four cigarette littering attitudes	65%	68%	68%	68%
UNDERSTANDING	'Cigarette butts do not cause significant harm to the environment'	35%	40%	43%	38%
RECALL	Recall of the campaign	18%	29%	36%	30%

The creative campaign remained live throughout summer 2023, aiming to maintain the metrics as they stand.

We will continue to collect the metrics over the project's lifespan, including as the creative evolves over year two, so we can assess if we are continuing to shift attitudes, understanding and behaviours over the course of the work programme.

FIELDWORK :

- Wave 1: 25 – 29 November 2022
- Wave 2: 3 – 6 January 2023
- Wave 3: 6 – 10 March 2023

* Office for National Statistics (ONS), released 5 September 2023, ONS website, statistical bulletin, Adult smoking habits in the UK: 2022

RESEARCH AND INNOVATION

OVERVIEW

The research and innovation programme for the first year had two stages.

Phase one: Establishing baseline data sets and research review

- A secondary research review of current legislative and practical approaches to managing cigarette litter globally and research into the impact of this litter to identify knowledge gaps and opportunities for further research.
- A baseline survey of the quantity and extent of cigarette litter across the country.
- A baseline survey of public attitudes to cigarette-related litter and littering.

Phase two: Campaign delivery, research and interventions

These studies informed the rest of the work programme for year one, encompassing a significant media campaign, trials of practical interventions that could help address the problem of cigarette-related litter and additional research to fill knowledge gaps and inform future work.

This research and intervention programme tackled the questions identified in the first phase:

- What are the factors (physical, social, and others) that influence smokers' actual, rather than reported, littering behaviours?
- What other disposal options can smokers use to dispose of their cigarette butts other than litter bins? How likely are smokers to use them now and how can we change their behaviour in the future?
- What are the options and the appetite among land managers to control and manage cigarette-related litter and what are the barriers?
- How can we show smokers the impacts of this litter on their local environment, to evoke the 'constructive guilt' that is most effective for behaviour change?
- How can we use practical interventions providing smokers with the right disposal options at the correct time to change behaviour?

BASELINE RESEARCH PROGRAMME: SECONDARY RESEARCH REVIEW

OVERVIEW

The secondary research review is a comprehensive evaluation of existing approaches to understanding cigarette litter and its impacts globally, together with verifiable impact analysis, placed within a policy context. The purpose was to gather existing work on the subject, identify and use prior learnings, identify knowledge gaps and inform phase two of the research programme.

TIMINGS

April 2022 to June 2022

PRINCIPAL LEARNINGS

This review showed that there was very little published research into tackling cigarette litter and that we required further research into smokers, options for disposal, impacts and behavioural interventions to inform the year one media campaign and the practical interventions.

It was instrumental in establishing phase two of the research and intervention strategy.

BASELINE LITTER SURVEY

OVERVIEW

This survey aspired to establish a baseline for the quantity and spread of cigarette-related litter, against which we could measure the progress of the work programme.

We calculated a count of cigarette-related litter per metre of roadway, as well as a total count.* The data plotted on a GIS dashboard enables analysis of accumulations and location by Index of Multiple Deprivation (IMD), region, land-use type and nearby points of interest.

This has helped to inform the scope and location of both practical interventions and the behaviour change campaign.

TIMINGS

May to November 2022

PRINCIPAL LEARNINGS

- Average rate of cigarette-related litter per metre of roadway across England was 0.137. The figure equates to approximately one piece every seven metres.
- 34,681 items of cigarette-related litter were counted in total across all sites sampled.
- When extrapolated, the figures show that 2.4 million cigarette butts are littered along high streets and nearby retail areas in England.
- The highest amount of litter found in one sampling location equated to 4.75 pieces of cigarette-related litter per metre.
- As a region, London has the highest rate for cigarette-related litter per metre, 0.23, equating to one piece every four metres of roadway.
- The first and the third IMD quintiles had the highest rate of cigarette-related litter at 0.17 cigarette-related litter per metre.
- Commercial areas (defined as Main Retail and Other Retail in previous government NI195 surveys) are the most littered, with rates of 0.27 cigarette-related litter per metre.

*Surveyors collected data within 247 Small Area Units (SAUs), Lower-Level Super Output Areas, calculated to be regionally representative by Index of Multiple Deprivation (IMD) quintile, and rural/urban split. Using a GIS litter mapping app, surveyors photographed every piece of litter larger than a five-pence coin. A specialist research organisation carried out each survey, analysing each photograph against its extensive database of photographs and identified cigarette butts, packaging and lighting materials.

BASELINE ATTITUDES SURVEY

OVERVIEW

This survey intended to establish baseline data on public attitudes to cigarette-related litter and littering at the project's outset. We used the YouGov UK Omnibus platform to question 2,000 non-smokers and 500 smokers (aged 18+) in May 2022. The purpose was to identify and understand smokers' disposal behaviours, attitudes towards littering, knowledge of littering actions and understanding of cigarette litter's impact in different locations and under specific circumstances.

The survey also collected and compared data from non-smokers on their perceived acceptability of disposal behaviours and impact of cigarette litter.

TIMINGS

May 2022 – June 2022

PRINCIPAL LEARNINGS

- Responses show interesting insights into attitudes to, and knowledge of, littering behaviour and its impact. Further statistical cluster analysis has provided us with valuable insight to target and shape subsequent campaigns and interventions in year two to tackle cigarette-related litter and to change behaviour.
- Smokers and non-smokers hold similar opinions on the top three 'worst' types of litter, except for cigarette butts, which non-smokers are three times more likely to identify as problematic than smokers.
- We identified a clear and consistent disparity between what smokers and non-smokers regard as acceptable and correct cigarette disposal behaviour.
- Smokers' claimed littering behaviours do not reflect Keep Britain Tidy's survey data, which found cigarette butts on 72% of all sites surveyed in England*, and that seven out of eight cigarettes are littered.** The implication is that asking smokers about their behaviour does not necessarily provide an accurate picture of actual behaviour, as it is likely heavily influenced by what they think they should be doing.
- We should collect further research to understand smokers' littering behaviour, motivations and barriers to behaviour change in its broadest context, including by observing actual behaviours, small-scale qualitative study, improved understanding of locational and socioeconomic factors, and thorough ethnographic research.

*Keep Britain Tidy National Litter Survey How Clean is England Leaflet 2019 2020.pdf (keepbritaintidy.org)
**Keep Britain Tidy; Litter Composition Analysis Summary Report March 2020 20200330 KBT Litter Composition Report - FINAL.pdf (keepbritaintidy.org)

UNDERSTANDING SMOKERS RESEARCH

OVERVIEW

Our baseline behavioural research review findings indicate that what smokers think they should say alters their responses about their littering behaviour, opinions and knowledge to some extent.

Therefore, we commissioned a specialist research agency that engaged with 30 adult smokers through a sophisticated online moderated group. They only interacted with the moderators, who asked them to keep a daily diary of their smoking and disposal habits. They also answered various questions by text and video to understand the social, situational and behavioural factors that cause them both to litter and not litter cigarette butts and whether these factors are conscious or unconscious.

The findings sought to identify commonalities and differences between smokers in how their interaction with their physical, social and emotional environment affects their littering behaviour.

Understanding this enables us to target and position campaigns and our interventions much more effectively.

TIMINGS

June 2022 to November 2022

PRINCIPAL LEARNINGS

- Do not sugar-coat the impact caused.
- The strategy must consider how we speak to and with smokers, and that smoking behaviours are not necessarily intentional.
- Most who smoke are disgusted by littering. However, nearly all acknowledge that they litter their butts.
- The behavioural mindsets that allow this littering to occur are inconstant, and smokers move from one to the other depending on varied factors. Therefore, only a multi-strand approach can tackle the problem.
- Smokers have a hierarchy of how and where they dispose of their litter. What else they are doing and their companions make a substantial difference to their littering behaviour.

ACADEMIC RESEARCH: IMPACTS

OVERVIEW

Our baseline research programme identified a lack of available research and significant knowledge gaps in the effects of cigarette litter. Our pre-campaign research clearly showed that the most motivating way to get smokers to change their littering behaviour is to show them tangible evidence of their direct impact on the environment around them.

The result is a form of ‘constructive guilt’, which we found the best way to give them agency and motivation to act positively.

Another knowledge gap was in the best ways to manage cigarette litter effectively. We are undertaking research analysing global best practice for managing cigarette litter and applying it to the UK. Working with a university internationally recognised in this field, we have engaged them to undertake new research to support this approach and inform our behaviour change work.

TIMINGS

Research began in September 2022

PRINCIPAL LEARNINGS

- Novel research into the impacts of littered cigarette butts on the local environment should inform and support our behaviour change campaign.
- Review and analysis of global approaches to tackling cigarette litter must shape our interventions workstream.

LAND MANAGERS AND CIGARETTE LITTER

OVERVIEW

Following the behaviour change campaign launch in November 2022, we contacted various land managers to understand what they are doing in England to tackle cigarette littering, and what would help them to manage it better.

We investigated using legislative opportunities, including licensing, prosecution, cleansing, bin provision and servicing, public awareness campaigns, ‘name and shame’ strategies, or the use of private companies to observe and prosecute cigarette litterers.

We also sought to understand the data being collected and perceptions of cigarette-related litter problems compared to other local environmental problems. The findings enable us to discern the appetite for further interventions, and identify partners to work with.

TIMINGS

January to May 2023

PRINCIPAL LEARNINGS

- The disparity between how much land mangers (officers), residents (customers) and councillors (board members) regarded cigarette litter as a problem was significant. Generally, those dealing directly with the litter on the ground understood it to be more of a priority problem. However, the councillors that responded to the survey also thought that it was a priority for them.

- Among those that used them, using litter fines (albeit periodically) was regarded as an effective deterrent and, by some, also a valuable data source on the location of incidents and information on the litterers.

- Overall, land managers felt that more information on cost, quantity and where smoking litter was located, alongside targeted behaviour change information for smokers that litter, would be most beneficial for effective management.

BEHAVIOUR CHANGE INTERVENTION: SMOKING ZONES

OVERVIEW

Keep Britain Tidy has developed a package for land managers to encourage smokers to dispose of their cigarette butts correctly in communal public areas with many daytime smokers.

We designed the 'Smoking Zone' solution to target cigarette litter hotspots. It provides smokers with a designated area in which to smoke and, more importantly, specialist facilities, created through research with smokers, that enable them to dispose of their cigarettes responsibly. It combines behavioural science insights with practical application to change smokers' littering behaviour, informed by initial pilot schemes.

The package gave partners expert advice on location and management, bespoke bins, floor stickers to 'nudge' smokers to use the zone, pre- and post-installation monitoring, and a full report.

Eight pilot sites participated in this behaviour change intervention across a wide range of settings under various management arrangements to ensure the package's successful roll out in future, on the understanding that they are responsible for the site's ongoing maintenance. Keep Britain Tidy staff worked closely with the land managers to correctly establish and monitor the impact. Behavioural observations and semi-structured interviews took place with smokers to monitor disposal behaviours in the three weeks before and after installing the Smoking Zone. We undertook behavioural observations at all sites again eight weeks post-installation to assess ongoing impact. We sought feedback from partners on their perspective of the pilot.

TIMINGS

November 2022 to June 2023

PRINCIPAL LEARNINGS

- Over the first three weeks, Smoking Zones reduced cigarette littering behaviour by an average of 56% across the eight sites, with a reduction of 100% at one location.

- Across all sites, 93% of smokers inside the Smoking Zones used bins for disposal and only 8%* littered cigarettes. Outside the zones, 65% used bins and 35% littered.

- The figures represent a reduction of 77% in observed cigarette littering behaviours when smokers are inside the zones and highlights the importance of directing them to stand or sit within the zone itself.

Longer term monitoring results showed that:

- Littering of cigarette butts decreased by an average of 36% across all eight sites eight weeks after installing the interventions.

- Infrastructure maintenance was essential

Areas providing the right bins, in the correct place, at the right time, do help to change littering behaviour and can form part of a solution. They are unsuitable for all sites, even within built-up areas, and potential partners were denied installation for various reasons.

*data totals 101% due to rounding

BEHAVIOUR CHANGE INTERVENTION: MORE BINS

OVERVIEW

We wanted to explore ways to stop smokers from littering their butts where this behaviour is typically evident – when out and about with friends.

We sought to tackle two common excuses for littering - that there are not enough bins and cigarettes might set a bin on fire.

We trialled - in nine pilot sites across England - whether providing a proliferation of effective disposal solutions can reduce smokers' littering behaviour. We tested large galvanised ash buckets filled with sand and bespoke novelty bins.

The selected intervention test sites were in a range of sites within towns and cities, but all in vibrant hospitality locations. We sited the bins in areas where cigarette littering was a problem and people dwelled while smoking. The locations were large enough to host numerous dedicated cigarette bins but small enough to make them feel saturated. There was also a strong relationship between management and businesses.

The interventions were designed to explore ways to develop a replicable partnership model between the body responsible for managing or cleansing the site and the businesses serving the customers who would also benefit from a cleaner environment.

To make this package most effective across the country, we located the pilot sites in many settings under various managers, on the understanding that they were responsible for ongoing site maintenance.

Keep Britain Tidy staff worked with the land managers to establish the sites correctly and monitor impact. Behavioural observations and semi-structured interviews took place with smokers to monitor disposal behaviours in the three weeks before and after installing the smoking zone. Behavioural observations took place at all sites again eight weeks post-installation to assess ongoing impact. We sought feedback from partners on their perspectives of the pilot.

TIMINGS

November 2022 to June 2023

A GALVANISED BIN USED IN THE INTERVENTION

BEHAVIOUR CHANGE INTERVENTION: MORE BINS

The bucket bins tested particularly well in the pilots:

- 83% of respondents said the bucket bins were easily identifiable as cigarette disposal containers.
- The bucket bins were popular because they were convenient, handy, simple and easy to use. Of particular note was that they were recognisably cigarette disposal bins and had a wide circumference and sand inside - considered an ideal option for quickly dropping their cigarette inside, knowing it wouldn't catch fire.
- 78% of smokers said the bucket bins would discourage them from littering their butts.
- Respondents emphasised the importance of the messaging on the bucket bins, stating: "If you put those orange signs around the bin, it's a great idea. It's plain and simple". "It tells people what to do and what it is".
- Most respondents felt that they should be installed elsewhere: "I loved it. It's got sand so no fire hazard", "good as you drop your cig in it and it won't catch fire", "good, got sand it in and there's lots of them all over the bars".

The novelty bins were popular and well received by the partners and members of the public. This pilot study identified some relatively small changes that could be made to improve their overall effectiveness. Where partners regularly emptied and maintained these bins, they encouraged and maintained correct disposal behaviour. The manufacturers have welcomed this timely feedback into their planned design update.

PRINCIPAL LEARNINGS

- At the sites installed with bucket bins, cigarette littering decreased by an average of 48%.
- Overall, littering decreased by an average of 18% across all nine sites after the interventions.
- Ongoing infrastructure maintenance is key to the intervention's success.

Longer term monitoring results showed the following:

- At the sites with bucket bins, cigarette littering decreased by an average of 17%.
- As a result, littering of cigarette butts decreased by an average of 3% across all nine sites eight-weeks after more bins were installed.
- At the novelty bin sites where infrastructure was well maintained, cigarette littering behaviour had decreased from the baseline.

Areas that provide the right bins, in the correct place, at the right time, help to change littering behaviour. They can form a part of a nationwide solution, but only in the right settings.

USER TESTING: PERSONAL DISPOSAL OPTIONS

OVERVIEW

We undertook rigorous user testing to understand what type(s) of commercially available personal ashtray smokers were most likely to use long term to contain their butts while out and about, rather than littering them.

First, we held eight workshops with an average of 60 smokers in four sites across the country. Smokers handled and evaluated 17 ashtrays and chose four they would buy. They also discussed their smoking and littering habits and opinions.

We sent the top four ashtrays from the groups to 220 smokers for in-home testing (each received two of the four and tested each for one week at a time), with a 100% return. We recontacted these testers eight weeks later to understand their continued interaction with the personal ashtrays longer term. These findings help to inform our understanding of the role that portable ashtrays could have in the campaign and intervention programme.

TIMINGS

July to November 2022 with follow-up results completed February 2023

PRINCIPAL LEARNINGS

- Before the focus groups, awareness of portable ashtrays was low (only 28% had heard of them) and top-of-mind reactions to the concept were largely negative. Overall, there were more barriers to than drivers for portable ashtray usage. The most common drivers were a fear of being fined and protection of wildlife or nature.
- Users viewed portable ashtrays as a hassle and raised concerns around smell, spillage, cost and fire safety.
- Of the 17 ashtrays tested, we identified four as having the most potential. Users liked them for being discreet, secure, easily carried and cleaned.
- The recontact study identified that the two front-runners in the portable ashtray test (a metal pull-out ashtray on a keyring and a metal screw-top container) continued to be the most used, with one in two still using them. One in four were still using the other two (a small aluminium container with a plastic lid and an inexpensive metallised pouch).
- Encouragingly, users got bolder. They began using their portable ashtrays mostly at home, but increasingly claimed usage while eating out and in the park and countryside.
- Just four in ten smokers would order a portable ashtray for free. This figure is maintained even in the recontact figures, indicating that even after prolonged use, portable ashtrays at this stage can only form part of the solution.

MOVING INTO YEAR TWO

NEXT STEPS

The work programme for year two will be underpinned by, and build on, the rich data and learnings from the first year:

- Expanding the work programme to a wider geographical area.
- Centring behaviour change campaign on specific smoking occasions, notably while smokers are ‘out and about’.
- Surveying to concentrate on filling knowledge gaps, such as where cigarettes are littered in hard-to-access and clean areas, and testing the bounds of the surveying technology in identification.
- Focusing research to enable targeted campaigning and insight-led behaviour change interventions. Directing the bulk of our research resource to encouraging and enabling positive behaviour change using the rich understanding of our audience and their behaviour gleaned in year one.
- Evaluating the work programme's effectiveness using an established, data-led suite of KPIs.

Keep Britain Tidy, the nation's leading anti-litter charity.
Registered Charity No. 1071737.