



# Dealing with sticky issues: chewing gum

Keep Wales Tidy 2016



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gymru'n wales  
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## Contents

Summary .....	2
Introduction .....	3
Understanding the problem .....	3
Spotlight On: Litter in Wales Research - Chewing Gum.....	4
Removal .....	5
Interventions and solutions .....	5
Spotlight On: ‘Gum Droppers’ Segmentation Study .....	5
Alternative Gum.....	7
Design.....	7
Logos .....	7
Behaviour Change .....	7
Spotlight on: GumDrop Trials.....	8
Education .....	9
Legislation and Enforcement .....	9
Conclusion.....	10
Recommended actions .....	11
Monitoring .....	11
Campaigns.....	11
Education .....	11
Funding .....	12
Responsible Disposal Solutions.....	12
Review .....	12
Legislation and Enforcement .....	12
Removal .....	12
Policy Link.....	13
References .....	14

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## Summary

The need to get rid of chewing gum immediately after use means that it is an item which is commonly disposed of irresponsibly, with gum staining present on almost three quarters of Wales' streets<sup>1</sup>.

Cleaning streets of gum is expensive and labour intensive, but not a legal requirement. However, it is recognised by the people of Wales as having a high impact and this is long lasting as gum can remain on the street for years.

This paper explores some research on the issue as well as the many methods which have been adopted in an attempt to tackle the problem. These include amending the product, advancements in removal and paving coating, campaigns aiming to educate, raise awareness and change behaviour, innovative disposal solutions, as well as legislation and enforcement measures.

The paper concludes with a series of broad recommendations to help inform policy and which can translate into practical and effective action. To achieve behaviour change and make the irresponsible disposal of gum socially unacceptable, all sectors must work together, with society having a key role to play.

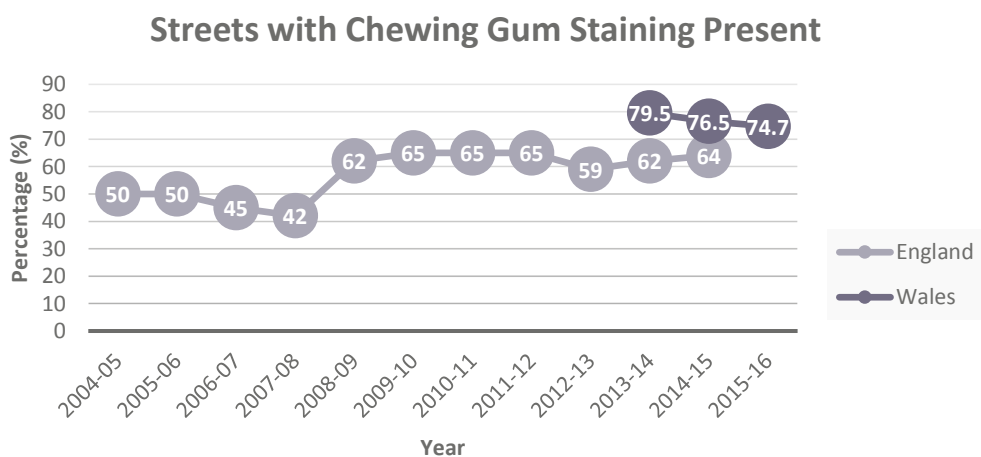


## Introduction

Chewing gum is a popular product, with around 47 million packets sold in Wales each year.<sup>2</sup> This is equivalent to every person buying over 15 packets each. However, almost 40,000 pieces are irresponsibly dropped on our streets each day<sup>3</sup>, causing big problems. Not only does it look unsightly, but the nature of chewing gum means that within no time it sticks hard and normal cleaning methods don't get close to removing it. Instead specialist, expensive and labour-intensive equipment is required to clean the effected surface. This makes cleansing very costly. While each piece of gum costs just 3p on average to the customer, the cleansing cost to local authorities is 50 times greater (£1.50 per piece).<sup>4</sup> Bridgend County Borough Council alone spends approximately £50,000 per year to clean up chewing gum.<sup>5</sup>

It seems that chewing gum, being small is not thought to be litter by some people. Any doubt on this subject was swiftly pushed aside with the introduction of the Clean Neighbourhoods and Environment Act 2005, where litter was defined to include products designed for chewing. However, the Code of Practice on Litter and Refuse and Associated Guidance 2007 states that local authorities aren't obliged to clean gum staining. Thus, the guidance, coupled with the high cost of cleansing and the fact that doing so can lead to damaged surfaces, means that many councils don't clean gum at all, or concentrate only on small areas adversely affected by the problem. Unfortunately for communities and local authorities, modern chewing gum is made of non-biodegradable synthetic polymers<sup>6</sup> that remain on our streets for up to five years.<sup>7</sup>

## Understanding the problem



Street cleanliness surveys conducted in England and Wales shows that chewing gum staining is widespread on our streets, see Figure 1 below.

**Figure 1: Percentage of Streets where Chewing Gum Staining is Present per Year in England<sup>8</sup> and Wales<sup>9</sup>**

Since 2004-05, when the baseline data was collected, the overall trend has been an increase in the presence of chewing gum staining across England. Although Wales has only 3 years of data in comparison, the presence of chewing gum staining here has decreased each year. The sampling methodologies for the surveys in both nations are slightly different so a direct comparison of the data is not possible.

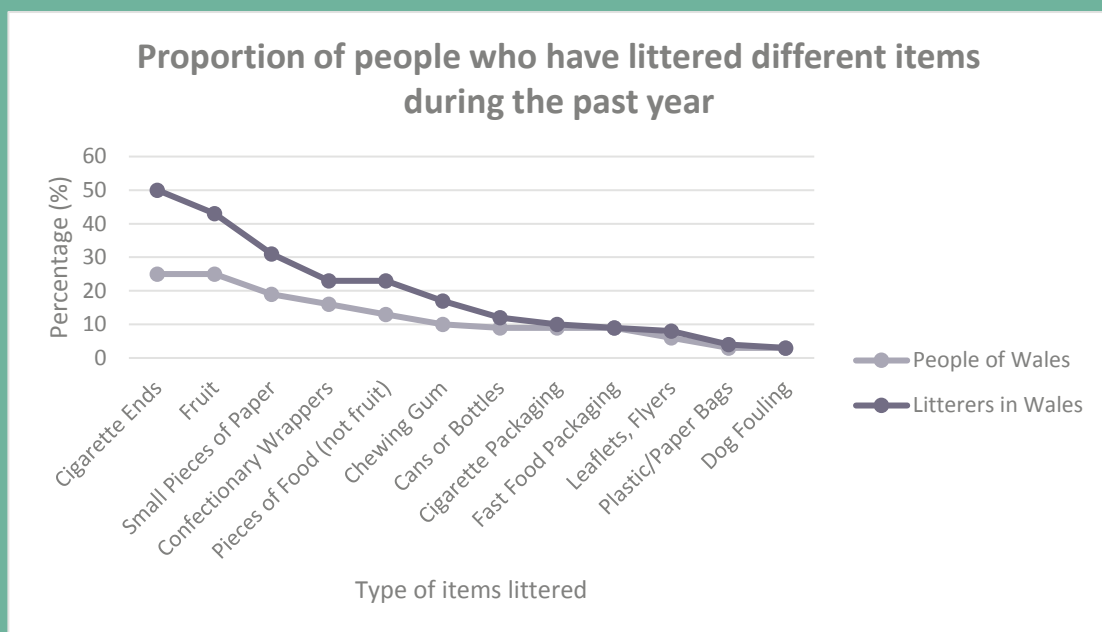
It's important to note that while chewing gum is widespread across Wales, the vast majority of streets have only a small presence, with less than 2% of streets having an accumulation of chewing gum staining.<sup>10</sup> Locations where chewing gum staining tends to be heavier includes town and city centres which have a high footfall. It's been estimated for example that there's 300,000 pieces of gum on London's Oxford Street<sup>11</sup>. Other places would be outside pubs and dental surgeries, at bus stops and train stations and around some litter bins.

## Spotlight On: Litter in Wales Research - Chewing Gum

The people of Wales believe that the problem has a negative impact on the areas in which they occur. The perception of Welsh people is that chewing gum has a high impact, mentioned by 65% of respondents (the third highest, after fast food packaging and cans and bottles); and is seen regularly, mentioned by 47% of respondents (also the third highest, after cigarette ends and cans and bottles).

The research also shows that chewing gum is the 6<sup>th</sup> most common type of item littered by both the Welsh public as a whole (10%) and specifically by Welsh litterers (17%).

**Figure 2: Proportion of People who have Littered Different Items During the Past Year**



For most items, the figures for those in the youngest age group (aged between 16 and 34) are higher than the total figures. Interestingly, the most difference (being above the total figure by 11%) is shown in the figures for confectionary wrappers and chewing gum.

Other findings from the research relating to chewing gum include:

Most litter types, including chewing gum, are more likely to be dropped in urban areas.

At 25%, chewing gum was the second most likely type of litter to be dropped from a car or from public transport (after small bits of paper at 27%).

A common scenario mentioned was discarding an item like a cigarette end or chewing gum at the bus stop as the bus approached, without thinking about it.

**Source: Beaufort Research (2010). *Litter in Wales: Understanding Littering and Litterers*. p 11 and 15. (Unpublished).**

# Removal

There are three main methods of removal:

- **High pressure jet washers** - using this equipment can damage some surfaces as well as mortar between paving joints
- **Low pressure steam washers** - this approach is more time consuming for the user
- **Scraping** - a technique which is limited to paving material with particularly smooth surfaces and works only on recently dropped gum

High and low-pressure washers impact street users, with requires cornering off areas or may involve unsociable working hours. Chemical choice should also be considered, with many products now marketed for their environmental credentials. Sometimes dark spots or residue is even left behind following a power wash.<sup>12</sup>

A protective coating may be applied to a variety of material surfaces which decrease future penetrability and thus making chewing gum less prone to sticking to the surface. Westminster City Council for example, has applied 'Magic Cote' to over 30 streets - the coating offers surface protection, which means that gum and other staining is washed away when it rains, instead of penetrating into the stone.<sup>13</sup>

There are, however, issues in relation to gum removal. It is a process which is expensive, time consuming, labour intensive, consumes water and energy and may involve the use of chemicals which can damage surfaces and the environment. Despite this, gum staining is an unsightly and persistent issue.

KWT believe that more innovation is required by industry to provide safe and environmentally sound methods of removal which do not affect infrastructure. For example, in 2013, Northern Ireland firm Experliere International launched Xpelgum, 'a kit costing nearly £300 and containing liquids which heat up and dissolve the polymers in the gum, and a brush which then removes it'.<sup>14</sup> Advantages over conventional cleansing methods include <sup>15</sup>:

- Cost - no heavy machinery is required
- Low impact - no damaging effects, no stains, minimum disruption to pedestrians
- Environment - no electricity power required, only a light rinse needed
- Flexibility - can be used on any paved surface as well as mats and carpets

## Interventions and solutions

### Spotlight On: 'Gum Droppers' Segmentation Study

The overall objective of this 2004 research undertaken in England by the Marketing Works was '...understand the attitudes and behaviours of gum droppers and to identify how their attitudes segment, in order to develop messages that will change their behaviour'. The results are very insightful and are summarised below.

Virtually everyone was aware of the correct disposal method, but there was an overwhelming need to get rid of gum immediately, with the material's sticky nature a clear barrier identified. The top reasons for failing to responsibly dispose of gum was no bins (or lack of them), that people didn't always have tissue, paper or foil to hand and laziness. Spitting out was especially prevalent from a car, due to the desire to keep personal space clean.

Gum wasn't considered to be litter by many (however for some it became litter when wrapped). Overall dropping gum was seen to lie on the positive end of the anti-social behaviour spectrum, worse than littering biodegradable items but better than failing to pick up after your dog or littering food, syringes or large items. Most people claimed not to drop other litter, apart from gum (and cigarette ends), as they considered this acceptable - everybody did it, and it's less visible than other litter. They failed to see any environmental consequences, however it was seen as a problem if others interacted with it, and this is why some made an effort to choose 'good places' to dispose of their gum (e.g. down a drain or into vegetation).

Less than half of people were aware of on-the-spot penalties for dropping litter (with the female respondents more familiar with the fact than the male ones), and two thirds were unaware of the amount of the penalty. However, 71% of respondents thought that the penalty would discourage gum dropping.

The research resulted in the following segmentations:

Segment	Proportion	Description	Some Characteristics
Revolted	58%	I'm disgusted by the idea of getting gum in your hair or stuck to clothes and shoes	More female The most frequent chewers Binning the favourite disposal method
Bravado	5%	It's good fun to spit and kick gum	More male Most likely to swallow, be daily chewers, aged 14-18 Throwing/spitting on the floor favourite disposal method
Selfish Cleanser	13%	I've got to get rid of it and get it out of my space	Equally male and female Least likely to swallow Throwing/spitting on the floor favourite disposal method
Whatever	8%	It doesn't matter – it isn't important – there are no consequences I should worry about	More male Most likely aged 14-18, from lower social economic groups Throwing/spitting on the floor favourite disposal method
Excuses, Excuses	16%	I feel guilty, but what can I do and everyone else does it anyway	More female Most likely to be heavy smokers Throwing/spitting on the floor favourite disposal method

Overall, younger people are less likely to care, with older people more likely to feel guilt. Suggestions on solutions were different from different people (which signifies that people would react differently to different methods), the most popular being bins, changing the product, packaging innovation, punitive action and education. However, the attitudes described above clearly show that some segments are more likely to change their behaviour than others. Behaviour could be changed by concentrating on: revulsion (Revolted), tidy instinct (selfish cleanser) and guilt (excuses excuses).

The research did put forward the following suggestions for a campaign messaging which would apply across the segments.

- Denied dropping litter: encouraging them to behave with gum as they do with litter
- Unaware of consequences: explain and dramatize
- Spitting is disgusting: connect spit with 'launching' gum
- Justify unacceptable behaviour (everyone does it, I drop it in an acceptable place, it's only small): burst the bubble and make them face the unacceptability of their behaviour

**Source: The Marketing Works. (2004). 'Gum Droppers' Segmentation Study. Available: <https://goo.gl/KJJ2xd> Last accessed 18th August 2016.**

## Alternative Gum

An organic, biodegradable and sustainable gum called Chicza<sup>16</sup> was launched by Mayan peasant farmers across UK Waitrose stores in 2009. Instead of bonding with paving stones as conventional gum does, this Mexican variety which is made from natural chicle can dissolve in the mouth or with rain<sup>17</sup>. It is a difficult market to break however, with Chicza significantly more expensive than conventional gum, and Wrigley having 95% of the UK market share in 2007<sup>18</sup>. Unlike conventional chewing gum, promoting this product into the mainstream could have unintended negative consequences on the natural resources which are harvested.

## Design

Other solutions therefore need to be taken into account, and one such consideration is design. Chewing gum staining is a commonly reported problem and a Keep Wales Tidy questionnaire survey to local authority cleansing departments highlighted the following design issues relating specifically to paving choice<sup>19</sup>:

- Maintenance - certain materials cause problems, e.g. tarmac cannot be jet-washed, while limestone and sandstone are unable to withstand jet-washing
- Joints - jet-washers sometimes remove joints which can lead to further problems such as trapped litter
- Colour - some slabs accentuate the appearance of gum staining

## Logos

The tidy man logo has been included on chewing gum packaging for many years, encouraging responsible disposal. The Industry Council for Research on Packaging and the Environment (INCPEN) encourages its members to include it on items that are likely to be consumed outside, and '*...some companies have 'personalised' the Tidyman logo to attract more attention to the anti-littering message*'<sup>20</sup>. We've been unable to find any research on whether or not the use of the logo in this way impacts behaviour.

## Behaviour Change

The Chewing Gum Action Group (CGAG), which was set up in 2003, is a leading UK group working to tackle the problem. It does this primarily through raising awareness of chewing gum litter and encouraging responsible disposal by running outdoor advertising campaigns every year. Wales joined in 2010, and the group which is chaired by Defra, is currently made up of the Local Government Association, the Food and Drink Federation, the Chartered Institution of Wastes Management, Keep Britain Tidy, the Scottish Government, Zero Waste Scotland, the Welsh Government, Keep Wales Tidy and the gum industry, (namely Wrigleys, Perfetti van Melle and Mondelez International). The industry provides £700,000 each year, which buys outdoor advertising for local authorities and Business Improvement Districts who successfully apply to be partners. These in turn plan a launch event (a local media campaign), work with local partners (e.g. businesses) and provide monitoring which is then fed back to the group.

The table below summaries the campaigns and their success in reducing gum staining since Welsh partners have been involved.



Year/Message	Welsh Partners and the Reductions Seen in Their Areas (where available)	Overall Reduction
2010: Bin your gum or it could cost you £75	Carmarthenshire (59% reduction)	50%
2011: Bin your gum or it could cost you £75	Carmarthenshire (60% reduction); Newport (82% reduction)	56%
2012: Do your country proud (Olympics-themed)	Cardiff (93% reduction)	54%
2013: Bin it your way	Neath Port Talbot (62% reduction)	47%
2014: Bin it your way	Blaenau Gwent	38%
2015: Bin it your way	No Welsh Partners	47%

*Source: Chewing Gum Action Group*

CGAG commissioned research<sup>21</sup> following the 2014 campaign (the most recent with a Welsh partner) with the aim of understanding consumer behaviour, attitudes and awareness of the campaign. The results showed that younger people tended to chew gum more often and those who dropped gum tend to be the more frequent users. It was positive to find that three quarters of respondents didn't drop gum, with over half saying that they had never dropped gum (the main reasons for this being dirtiness and the negative effect that gum has on clothes). Another positive outcome was that respondents did seem to consider gum to be litter, with 64% agreeing that they'd feel guilty if they dropped gum. As far as the awareness of the campaign, 31% were aware of the campaign (with binning gum the most likely recall), which increased to 40% when prompted, and 10 respondents claimed to have stopped dropping their gum as a result of the campaign.

Last year, London-based charity Hubbub ran chewing gum campaigns. These included innovatively highlighting gum staining which would often go unnoticed by circling each piece with chalk and encouraging chewers to be artistic by placing their used gum on displays to reveal messages about gum litter.<sup>22</sup>

In 2011, Roskilde University in Denmark attempted to 'nudge' people into binning their litter. First the students handed out free caramels in Copenhagen and counted how many wrappers ended up littering the streets. Then they placed green footprints leading to the bins and repeated the exercise. They found that the simple nudge technique led to a 46% decrease in litter.<sup>23</sup> Although not specific to gum litter, the same principles could be followed to see if people could be successfully nudged into binning their gum responsibly, particularly if efforts were made in young/student areas to highlight the fact that gum is litter.

Some councils have turned to offering free solutions to chewers. These include the distribution of special wallets in Sunderland<sup>24</sup> and gum raps in Bedford<sup>25</sup>. Others have installed specific gum bins or signage on bins to encourage the responsible disposal of gum litter (as observed by Keep Wales Tidy staff).

## Spotlight on: GumDrop Trials

Gumdrop bins are small, bright pink chewing gum bins. Once filled, the bin and its contents gets recycled into 3 new Gumdrop bins as well as other products.

Between August and December 2013, Keep Wales Tidy in partnership with Wrigley's and Cardiff Council trialed 100 Gumdrop bins across the city. Some of the main results and lessons learned were as follows:

- The bins were well received

- Vandalism was a problem with some of the bins, so the back plate was redesigned to strengthen the design, but these new fixings didn't solve the problem completely

- Levels of gum staining improved or stayed the same in 74% of locations

Everybody who took part in the end of trial questionnaire wanted to see the bins installed permanently

In 2014, Swansea offered to sponsor GumDrop bins for local schools.<sup>26</sup>

Gumdrop has also developed 'on-the-go' pocket bins that may be attached to key rings and which can hold up to 20 pieces of gum. Between October 2013 and February 2014, Wrigley's funded a campaign to tackle chewing gum littering on the High Street in Bangor, which Keep Wales Tidy ran in partnership with Gwynedd Council, Gumdrop Ltd, Bangor City Council and local businesses. Two giveaway days were held on the Bangor High Street where Gumdrops-on-the-go were handed out to the public. Once full, they could be discarded into any of the 15 Gumdrop drop boxes located in shops on the High Street. The results showed an overall gum reduction of 56.6%. Questionnaire results showed that all respondents thought the Gumdrop on-the-go was a good idea, with 95% saying that they'd use the pocket bin.

## Education

**The Litter Less Campaign, which is funded by the Wrigley Company Foundation and led by the Foundation for Environmental Education, aims to '*...reduce litter and affect long-term behaviour change among youth around the world*'<sup>27</sup>. In Wales, it is run through the Eco-Schools programme.**

Stanwell secondary school in Penarth recently joined Litter Less, and as part of this a year 7 class decided to take action on the littering of chewing gum within the school ground and in the local area, with counts showing over 2,000 pieces present in one classroom alone. Work began on the 'The Unchew-it Campaign', with a questionnaire of the year 7 pupils, which was followed by the creation of promotional resources such as posters and PowerPoint slides for assemblies. These made pupils and staff think about the way they dispose of unwanted gum and what impact it can have on the environment.

Over the past few years, chewing gum litter has also been a topic raised in special events undertaken in schools. For example, Welsh Government Tidy Towns funding has enabled the Gregory Brothers Litter Roadshow to travel around all primary schools in many local authorities, and a key theme of that show was gum litter. In addition, Keep Wales Tidy attended a litter gum workshop for Key Stage 3 at Fitzalan High School in Cardiff, which included interactive sketches (with elements of humour) and questionnaires. The event was effective in engaging with the pupils, which was proved by the fact that they were comfortable to discuss their habits - perhaps surprisingly, a large number admitted to dropping gum.

## Legislation and Enforcement

**For those who fail to react to awareness raising, education, and engagement, it's important that another avenue is available to the authorities – that of the stick.**

In terms of chewing gum, Singapore is the most extreme example of this, having introduced a ban on its sale and importation in 1992. Illegal gum trafficking carries a penalty of up to S\$100,000 (£49,000) or up to 2 years behind bars, even for a first offence, and although a minor exemption was introduced in 2004 for chewing gum with therapeutic value, the law had an immediate effect on the city-state's cleanliness.<sup>28</sup> In 2009, the Mayor of Adelaide threatened to follow suit with a ban on the sale of gum in the Central Business District unless Wrigley's agreed to clean up the problem or fund an education programme, but the manufacturer stated that it was an issue of personal responsibility and that existing litter laws should be enforced.<sup>29</sup>

Defra proposed the development of voluntary schemes in 2003 to restrict the sale of gum in areas badly affected by staining<sup>30</sup>, however this was rejected by the industry and local authorities<sup>31</sup>. In

2006, the Republic of Ireland abandoned their plans to introduce a 10% tax on chewing gum after the industry pledged €7 million to fund a litter campaign.<sup>32</sup> Then in 2012, Darren Millar AM for Clwyd West proposed a similar initiative with a private member's bill to introduce a 5p tax on chewing gum in Wales, where the proceeds would be used to fund education, enforcement and cleansing. Once again, the proposal sent shock waves through the industry, with Wrigley senior vice-president traveling to Cardiff all the way from Chicago to meet the AM<sup>33</sup>. The manufacturer was of the view that a levy would give people a '*licence to litter*'<sup>34</sup>. A debate was held in the Senedd, where Ann Jones AM said that she had '*...reservations about the responsible majority paying for the mindless minority...*'<sup>35</sup>, and in the end, the proposal was rejected at the Senedd by 30 votes to 17<sup>36</sup>. This time however, the chewing gum giant made no financial pledge. Instead, Wrigley's focused on looking at other ways to stop gum litter, such as UK degradable gum Rev7.<sup>37</sup> A 2015 House of Commons report stated that they would revisit the possibility of a levy in the near future unless significant improvements are seen.<sup>38</sup> It is unlikely that the idea of imposing a levy on gum has disappeared entirely in the UK and it will likely be revisited. While there are arguments on both sides, it is clear that this is a political and emotive issue. Solutions to gum litter, be it removal, design, the product itself, economic or legal interventions are sorely needed to tackle the issue.

The most recent data shows that Welsh local authorities issued a total of 13,533 Fixed Penalty Notices for littering in 2014-15, including 6,123 for smoking-related litter; these figures vary significantly from place to place, from none to a handful in some local authorities to thousands in others.<sup>39</sup> However, apart from smoking-related litter, the data doesn't break the figures down according to any other litter type. It is likely to be very low for chewing gum however, as it's difficult to catch offenders, with Carmarthenshire issuing its first ever FPN for chewing gum as recently as 2012<sup>40</sup>. In fact, that was the only FPN issued in Wales for the littering of chewing gum that year.<sup>41</sup>

In 2005, Keep Northern Ireland Beautiful called on wardens to be issued with £1 swab kits which would enable them to identify gum litterers through the DNA.<sup>42</sup> The idea may seem a little far-fetched, but such a technique was adopted in Hong Kong's 2015 The Face of Litter Campaign, where DNA technology was used to create digital 'most wanted' posters which were plastered on bus stops and metro stations across the city.<sup>43</sup> The samples provided enough information to predict many features including eye, hair and skin colour as well as ethnicity accurately<sup>44</sup>, and the approximate age could be determined by combining demographics of the area and litter type, to '*...put a face on this anonymous crime...*'<sup>45</sup>. The campaign reached over 4 million people on social media, with a video and posts being shared across southeast Asia, the USA and Brazil.<sup>46</sup> The BBC has also recently looked into how DNA technology can be used in the UK to catch offenders of environmental crime.<sup>47</sup>

Although both are important, given that the cost of cleansing and the difficulty of enforcement, Keep Wales Tidy considers prevention the best solution to the problem. Tackling the issue at source through behaviour change is the most sustainable means of addressing irresponsible littering behaviours.

## Conclusion

**The need to get rid of chewing gum immediately after use means that tens of thousands of pieces are disposed of irresponsibly in Wales every day, with gum staining present on almost three quarters of our streets. Cleaning streets of gum is expensive and labour intensive, but not a legal requirement. However, it is recognised by the people of Wales as having a high impact and this is long lasting as gum can remain on the street for years.**

Many methods have been adopted in an attempt to tackle the issue, including amending the product, advancements in removal and paving coating, campaigns aiming to educate, raise awareness and change behaviour, innovative disposal solutions, as well as legislation and enforcement measures. We need to build on these by using the wealth of information available in the various research studies to move forward in changing behaviour and making the irresponsible disposal of gum socially unacceptable.

## Recommended actions

**Since prevention through behaviour change is the only solution which is sustainable (by tackling the root of the problem), this should be the main focus going forward. Even though innovative ideas such as biodegradable gum and protective coating could go some way to help, by themselves they don't stop littering.**

As with all environmental issues, chewing gum litter is caused by a minority of people, but impacts on everybody and tackling the issue shouldn't fall on one body working alone but instead all sectors collaborating, namely the industry, government (both national and local) and the third sector. Most important of all however is reaching those individuals responsible - indeed this is everybody's responsibility, and society has a key role to play.

### Monitoring

Recording the location and severity of chewing gum litter is and will continue to be key to understanding the issue and monitoring the impact of any action taken. Keep Wales Tidy will continue to record chewing gum staining as part of our street cleanliness surveys across Wales, and we will publish the national figures annually as part of our All Wales Report.

### Campaigns

Campaigns which highlight the issue, its impacts and consequences are valuable. Many have been successful in the areas in which they have occurred and have also provided useful lessons which can be learned from for future development. However, campaigns are usually restricted to a few specific locations and are therefore limited in their reach as far as society-wide behaviour change across Wales is concerned.

In addition, in the case of CGAG, there has been a reduction in the involvement of Welsh partners in recent years. Although we have no evidence as to the reasons for this, they are likely to include the following factors:

- the fact that the campaigns don't provide funding (as such)
- the significant input required by partners in terms of promotion, partnership working, monitoring and reporting
- the fact with on-going cuts to public purses, dealing with a non-statutory issue such as chewing gum staining isn't on the top of the priority list
- It does mean that unfortunately Wales hasn't benefited from the campaigns over recent years.
- It is positive however that Wrigley has recently funded other litter initiatives in Wales, including Litter Less and other pilot projects, and remains committed to trying to address behaviour change.
- Keep Wales Tidy hasn't undertaken a project focusing specifically on chewing gum in recent years. Learning from other projects undertaken by ourselves and others e.g. in the field of social marketing, we should consider a gum project, particularly as CGAG campaigns haven't been active in Wales after 2014.

### Education

As noted in this paper, the primary demographics responsible for gum litter is young people. Consistent messaging in or around schools could have an impact, particularly in those where it's known to be a problem. This is ideally done through third parties and not corporations as many schools have banned chewing gum on their premises as it has been so problematic, but information and awareness could go a long way to affecting behaviour change if it was done in a consistent and proven way. This could be done through the Eco-Schools network, as has already happened in some schools through the Litter Less campaign, and should be considered in collaboration with any local authority actions, campaigns or priorities.

## **Funding**

When we compare the funding made available by the industry to tackle the problem in Wales (and the rest of the UK) with the situation in Ireland, it is clear that funding is uneven. A partnership approach would be needed to negotiate the way forward and Keep Wales Tidy should support a negotiated agreement between the Welsh Government and the industry as a means of generating money to tackling the problem. A relevant platform for dialogue may be within CGAG, which is represented by the industry and the Welsh Government. This does not rule out any financial or legislative interventions in the long term.

## **Responsible Disposal Solutions**

Gum wrap products provide a good solution, but can only be used once. Some gum brands are packaged in a way that the pieces are individually wrapped, thus also providing a means of the used gum to be wrapped. However, other brands are packaged differently and don't include this feature. Manufacturers who have in the past stated their intention of focusing on degradable gum could be approached to instead change the product design so that all brands include a means of wrapping the gum after use. Chewers' need to dispose of gum immediately suggests that having a wrap included as part of gum packaging would be an effective solution, particularly as this was a popular suggestion put forward in the 2004 research.

## **Review**

It is beneficial to keep up to date with different approaches adopted in dealing with chewing gum litter and staining in an attempt to learn from successes and failures from elsewhere. Keep Wales Tidy will continue to review and disseminate good practice from Wales and beyond as appropriate.

## **Legislation and Enforcement**

Wales will be keeping a close eye on developments in England in relation to revisiting the possibility of introducing a chewing gum levy. Although unlikely to be popular across the spectrum, this levy could serve as a way of creating a ring-fenced fund to be used for street cleansing.

The 2014 CGAG research<sup>48</sup> showed that respondents felt there was a value in fining, but 99% were unaware of how much it was. There was also a strong sense that they wouldn't get caught and fined (visibility of officers was very limited). However, awareness and visibility of enforcement was highest in Blaenau Gwent and overall 27 respondents in the research said that they'd stopped dropping their gum due to awareness of enforcement or having seen an officer. Therefore, if used effectively, enforcement can achieve much more than merely punishing offenders. Officers can also play a preventative role, particularly if they are highly visible, located strategically in hotspot or high footfall areas and they engage positively with the community by encouraging responsible behaviour. Publicising their role and the penalties issued to offenders can also act as a deterrent to others.

Since enforcing gum litterers is difficult, local authorities may use tactics such as publishing the images of offenders via social media, on their websites, or in local press to identify them and ease enforcement, as has been done recently in Rhondda Cynon Taf<sup>49</sup>.

## **Removal**

Although the recommendations have focused on prevention, we must recognise that behaviour change doesn't happen overnight. Therefore, removal will continue to be undertaken alongside prevention methods, where appropriate.

High pressure washers can be used to remove graffiti and fly-posting, making them more economically viable.

In 2014, gum removal was made possible in Swansea due the purchase of the equipment with Welsh Government Tidy Towns funding and partnership working with the Business Improvement District (BID).<sup>50</sup> BIDs are relatively new to Wales, but many are in development and provide an opportunity to raise funds and address issues which are problematic to that specific locality.

In the past, cleansing has been made more feasible as local authorities have agreed to share gum removal equipment through Tidy Towns cross boundary working. This should be encouraged further through existing networks and forums.

Innovative removal and coating methods should be further explored.

## Policy Link

[Code of Practice on Litter and Refuse and Associated Guidance 2007](#)

[Clean Neighbourhoods and Environment Act 2005](#)

## Contact

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