

Guide to prevent cigarette butt littering

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An overview



The NSW Government is committed to reducing cigarette butt litter and littering behaviour in NSW. This guide provides detailed steps on how best to achieve this, developed from research and trials designed and tested across NSW. For further background information on this research visit www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/epa-work-prevent-litter/reducing-cigarette-butt-litter

Land managers, local government and community representatives can prevent cigarette butts from being littered by following this guide. Applying these strategies to public places across NSW can prevent almost 800 million cigarette butts from entering the environment.

Why reduce cigarette butt litter?

Approximately 1.32 billion butts are littered in NSW each year. Butts are made of plastic cellulose acetate, a pollutant releasing over 400 toxic chemicals into the environment and waterways. Unextinguished littered butts are a potential fire hazard. Accumulated butt litter attracts more littering and the clean up of unsightly butt litter is often difficult and expensive. Nudging smokers to shift from littering butts to being engaged in litter prevention has environmental, social and economic benefits.

Prevent cigarette butt littering by leading on the social compact

In 2018 the NSW Government partnered with 16 local councils to trial a range of interventions to reduce cigarette butt littering behaviour. These included improving the features of outdoor areas where smokers congregate. The interventions increased butt-binning rates by 53%.

Improvements in binning rates were due to increased stakeholder engagement in the smoking area. Smokers using the target areas saw the land manager's leadership and commitment to prevention of butt littering and responded appropriately. The reciprocal and mutually beneficial actions of these stakeholders is explained by the "social compact" – producing shared social benefits whereby smokers follow an unspoken agreement to do their part by responding to land managers' initiatives to improve areas.

Land managers who objectively review the way smokers interact with a smoking area can identify needed improvements, understand the 'social compact' operating in the area and can design and implement projects that respond to local challenges.

How the social compact works in practice

- A clean area free of butt litter signals the social norm of pride in a place and an expectation of active involvement in keeping the area clean
- Signposts, pavement stencils and bin stickers in the area
 - highlight that the area is suitable for smoking
 - remind smokers to place butt litter in the bin
 - direct smokers to the nearest butt bin
 - clarify expectations to use butt bins
- Seeing other smokers binning butts reinforces a positive perception of responsible disposal
- Providing clean, accessible and visible bins indicates to smokers that land managers are catering to smokers' needs.
- Promoting butt littering behaviour as undesirable and unacceptable sets a positive social norm.

An overview

NSW smoke-free laws and policies

The NSW Government is committed to reducing smoking and smoking related harm. Projects must adhere to the relevant legislation and consider the impact on non-smokers. The *Smoke-free Environment Act 2000* bans smoking and using e-cigarettes in enclosed public places and certain outdoor public places:

- public transport stops and stations
- within 10 metres of children's playgrounds
- at spectator areas of sporting grounds while an organised sporting event is being held
- at public swimming pool complexes
- within 4 metres of a pedestrian access point to a public building
- in commercial outdoor dining areas being: a seated dining area, within 4 metres of a seated dining area on licensed premises, restaurant or café, and within 10 metres of a food fair stall.

Projects must not seek to encourage smoking, rather they should focus on encouraging proper cigarette butt disposal. No incentives or inducements to smoking should be offered.

Considerations when creating smoking areas

Any smoking area must adhere to the legislation. Moreover, consideration should be given to additional factors, including:

- **Potential for second-hand smoke to impact non-smokers**

The impact of smoke drift towards apartments or units above, or surrounding restaurants and cafes.

- **How busy a site is**

Ideally smoking areas should be away from busy areas or areas where non-smokers are congregating.

Creating a smoking area is a key strategy to build the social compact with smokers, and to encourage them to take care of an area. However, in some cases, creating a formal smoking area may not be practical. In such cases, project managers need to think creatively about how to build the social compact without creating a formal smoking area. There are other strategies outlined in these guidelines to nudge smokers to use bins without the need for a formal smoking area.



An overview

How to reduce cigarette butt litter and littering behaviour

This guide lists 13 proven steps to prevent cigarette butt litter across three key stages:



Preventing cigarette butt litter: step by step



Stage 1

Understand the problem

Stage one requires identifying, understanding and gathering evidence about the factors that contribute to people littering cigarette butts in your target areas.

This stage provides:

- increased understanding of local problems and solutions
- objective data and evidence about the issues contributing to butt littering
- clear information on where to focus interventions and where to get assistance
- guidance for decision making in delivering the project
- baseline data to inform the impact of future interventions.

Step 1: Understand the target area

Action:

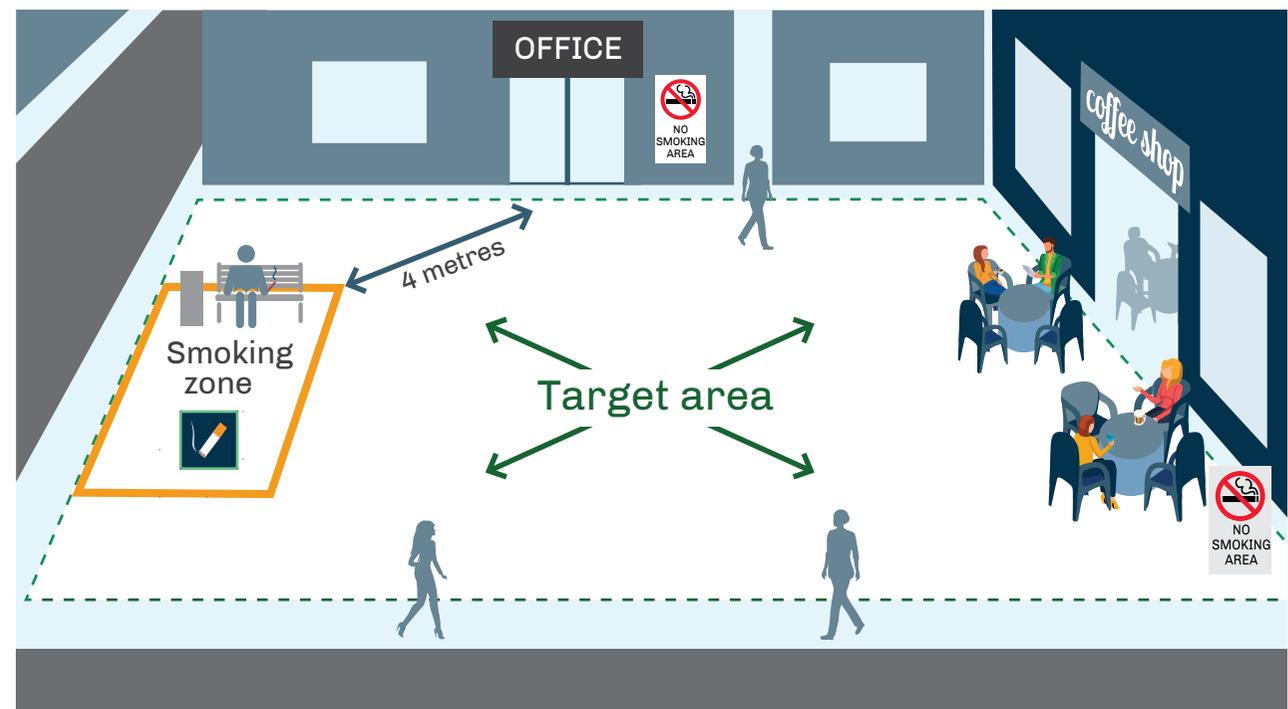
Walk around your target area and establish clear boundaries. It needs to be a manageable size for observing smoker behaviour and implementing strategies.

Guidance:

Consider whether it's possible to establish a designated smoking zone in the area. At times,

smokers congregate in non-smoking areas so it is important to establish the legality of smoking in the target area and consider the need to redirect smokers to a more appropriate place.

Any smoking area must adhere to the requirements of the *Smoke-free Environment Act 2000* which bans smoking in enclosed public places and certain outdoor public places as listed on page 3.



Preventing cigarette butt litter: step by step

Step 2: Consult and engage

Action:

Identify who 'owns' the area and who is responsible for maintenance of the area and amenities. Ideally seek permission early on from the land manager to implement a project.

Guidance:

It is important to communicate with all stakeholders to prevent misunderstandings, especially regarding responsibilities for cleaning and servicing. Early stakeholder engagement informs the social compact and leads to more effective allocation of resources with better-targeted interventions.

Make sure to engage with non-smokers and other site users to design interventions that do not conflict with broader stakeholders.



Preventing cigarette butt litter: step by step

Step 3: Complete a Butt Litter Check to assess elements linked to butt littering

Action:

Complete a [Butt Litter Check](#) to gather objective evidence to inform appropriate interventions that tackle butt littering in the target area.

Guidance:

The Butt Litter Check has been developed to help understand why smokers may be littering cigarette butts and how to develop targeted ways to stop this behaviour.

The Butt Litter Check Guidelines will take you through the four steps involved. A Butt Litter Check should take around 30 minutes to complete at each smoking area and will include at least one 15-minute observation session of smoker disposal actions in each area.

Resources:

Butt litter Check and guidelines are available [here](#).

Support:

Contact litter.prevention@epa.nsw.gov.au if support is required in undertaking a Butt Litter Check.

Tracking the cigarette butt binning rate is key

To build solid baseline data, you should ideally aim to record at least 20 cigarette butt disposals – but the more the better.

The Butt Litter Check captures a range of data, most importantly the butt binning rate, which directly assesses smokers' disposal behaviour. Comparing results from data gathered before a project (at baseline) and after its delivery (impact) is used to indicate effectiveness. Other elements from within the Butt Litter Check assess contextual factors, smokers' knowledge, attitudes and beliefs.

Different patterns of butt disposal can be identified for a range of smoking areas. Littering rates are generally higher in transition points where smokers are required to finish a cigarette en route to the next destination, compared to places set aside where people can sit, relax and smoke. Insights into the way a smoking area is set up, the features which define it, how smokers are influenced by it and potential improvements are objectively identified in the Butt Litter Check.



Preventing cigarette butt litter: step by step

Step 4: Gather additional evidence

Action:

Collect additional data to help inform and measure your intervention.

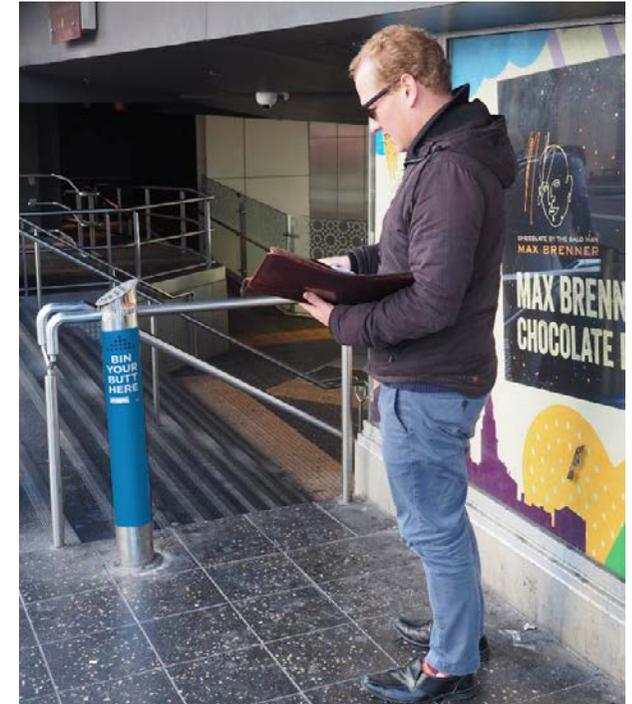
Guidance:

There are a range of additional measures beyond the Butt Litter Check that may also provide insight into what is driving behaviour. Before implementing your project, ensure to collect and collate all data you may need to design, monitor and evaluate your project. This includes:

- records of butt litter counts, and butt litter collections made by contractors and/or council cleansing crews
- assessment of relationships developed during the project covering stakeholder satisfaction, partnership development
- measures of key performance indicators including achievement of objectives, value for effort, lessons for refining project delivery, what worked, what didn't and identifying resources invested to deliver interventions and improve management.

Explore successful local comparisons – often all the attention is on high littering rates in 'hot spot' problem smoking areas while local achievements in butt litter prevention go unnoticed. An option for developing interventions that work locally involves finding a similar smoking location to the target area where there are low littering rates.

Seek further understanding and ideas – occasionally after completing the Butt Litter Check and thinking about what might suit smokers' patterns of disposal in an area, there are no ready solutions, or difficulties may have been encountered in gathering enough data for results to be meaningful.



Preventing cigarette butt litter: step by step



Stage 2 Implementing strategies

Implementing the following steps will deliver reduced butt littering in target areas. Each of these steps aim to build the social compact.

Is a smoking zone practical?

In many cases, creating a formal smoking area will not be practical when considering the size of the area and potential impact on non-smokers.

In these cases, you may need to consider alternate locations or be creative in how you engage smokers in the social compact, and nudge smokers towards appropriate locations and bin use.

Requirements under the *Smoke-free Environment Act 2000*

When considering where to direct smokers in your target area, you must consider relevant legislation and potential impacts on site uses, especially non-smokers. Consider the potential for smoke drift to nearby cafes, restaurants and apartments above.

Undertake regular monitoring and evaluation of smoking areas to ensure any impact on the community is addressed.

Step 5: Establish a smoking zone

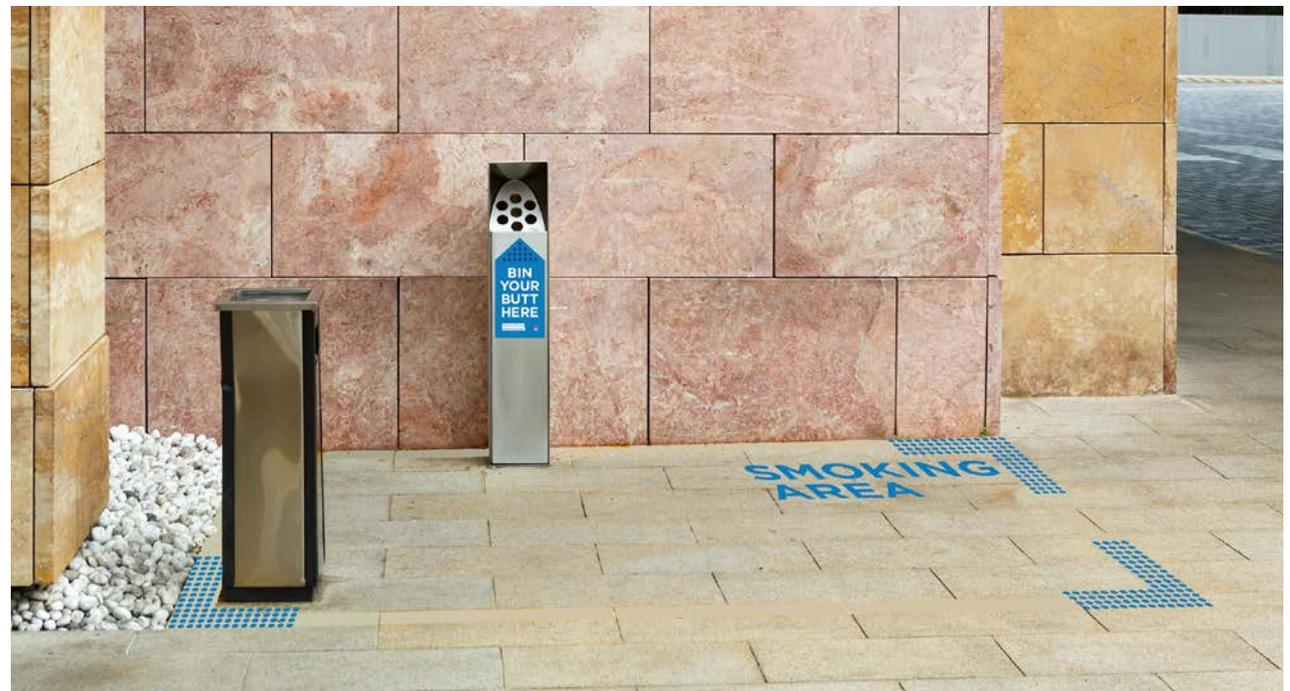
Action:

Create a designated zone for smokers to use with access to a bin within your target area.

Guidance:

Smokers respond positively to designated smoking areas and are more likely to look after and keep the area clean. Getting feedback from smokers about how to create and improve the area can influence success and build the social compact.

When creating a smoking zone, consider the size of your target area, how busy it is, and potential for smoke-drift affecting non-smokers. The area you create could be a formal demarcated zone, or a more informal area where you encourage smokers to congregate. You may need to be creative in how you set up the space, paying attention to how people use and move through the area.



Preventing cigarette butt litter: step by step

Step 6: Install bins

Action:

Install a designated butt bin. General litter bins with appropriate messaging indicating permission to dispose of a used butt will be enough if a butt bin cannot be installed.

Guidance:

Bins are an integral part of a strategy in reducing cigarette butt litter. The placement, visibility and design of your bin or ashtray can influence whether it is used or not.

Placement of bins

- Cigarette butt bins must be placed in appropriate locations to ensure they are not breaking legislation.
- The *Smoke-free Environment Act 2000* makes several outdoor public places smoke-free. Smoking is banned within four metres of a pedestrian entrance to or exit from a public building in NSW – the 'four metre law'.
- It is advised that cigarette butt bins are placed at an appropriate distance from pedestrian entrances or exits of a public building (i.e. greater than four metres). This is to minimise smokers congregating around the bins which may be against legislation.
- It is not an offence to smoke along a footpath within four metres of entrances or exits, so long as you do not remain in one spot.

Bin design

All bins should have the following characteristics:

- Large enough to hold a high volume of cigarette butts
- Easy to clean and use, with large holes to insert the cigarette butts

- Clear signage that indicates it is for cigarette butts
- Hard to break open where scavenging is an issue

Resources:

Contact litter.prevention@epa.nsw.gov.au for a list of butt bin brands and specifications.



Preventing cigarette butt litter: step by step

Step 7: Cleaning and infrastructure

Action:

Ensure the area is clean and install any appropriate infrastructure to improve the area, such as seating, shelter or landscaping.

Guidance:

Cleanliness is an important factor which influences social compact, especially as litter attracts more litter. Establishing or improving infrastructure will influence long-term positive behaviour change.

Maintaining infrastructure can be expensive so it is important to note this for consultation. Smokers can be asked for ideas on improving the area when completing the Butt Litter Check in stage 1.



Preventing cigarette butt litter: step by step

Step 8: Direct smokers to the designated smoking area and bins

Action:

Ensure smokers in the area know where the designated smoking area is through pavement stencils, signage, bin stickers and an engagement campaign.

Guidance:

Consider using pavement stencils to direct smokers to the nearest smoking area and bin. Place signs at strategic locations, such as litter hotspots, or in non-smoking areas being incorrectly used by smokers. Placement of stickers on bins can also help highlight bins and smoking areas. Consistency must be maintained with signage and symbols to clearly guide smokers.

Often a short conversation with a few smokers directing them to the nearest smoking area can change broader smoking patterns in the area. Consider enlisting other smokers to direct wayward smokers to use the designated smoking zones.

Resources:

Pavement stencils and bin stickers are available in the [litter library](#).



Preventing cigarette butt litter: step by step

Step 9: Build smoker ownership of the area

Action:

Clearly identify the area as a smoking area to create a level of ownership.

Guidance:

Consider placing a smoking sign stencil, installing other signage or placing markings on the ground to indicate the smoking area.

Having conversations with smokers to direct them to the smoking zone is another strategy to encourage ownership.

Consider creating smoking zones with appealing features such as water fountains, benches or garden beds, rather than derelict areas.

Resources:

Smoking sign stencils are available in the [litter library](#).



Building ownership is key to reducing cigarette butt litter

People litter an area less when they have a greater sense of ownership. Results from the NSW cigarette butt litter trial showed the most successful strategies were able to build smoker ownership of an area.

Research shows that smokers do not respond to being shamed or ostracised. Instead, working with smokers to create clean functional spaces can build the social compact and encourage smokers to take greater responsibility of an area.



Preventing cigarette butt litter: step by step

Step 10: Education and social norming

Action:

Inform site users of the appropriate behaviour and set new positive social norms through engaging with smokers and installing signage.

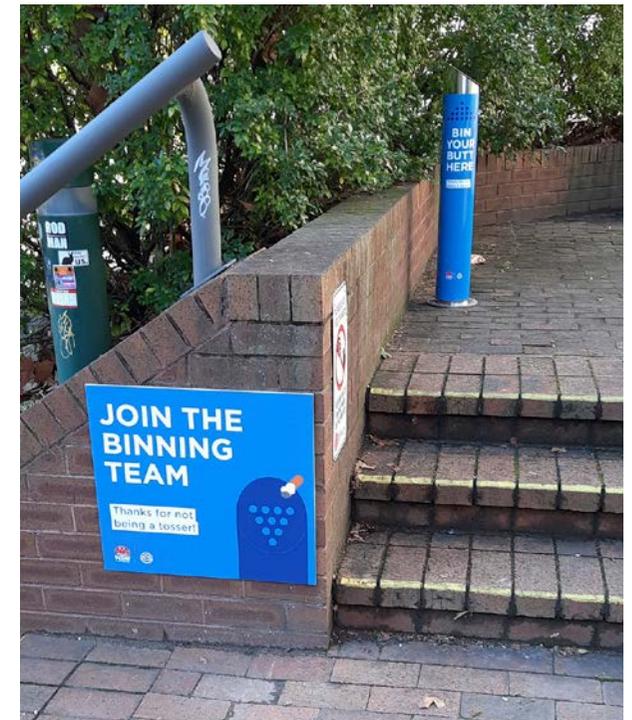
Guidance:

Cigarette butt littering can be influenced by personal attitudes and beliefs, including the belief that cigarette butts are made of cotton and are biodegradable, when they are in fact plastic.

- Tell people that littering is not welcome.
- Educate people about the impacts of litter, e.g. it damages our waterways, bushland and wildlife.
- Explain that butts are made from plastic.
- Tell people that fines apply and that litterers are being watched.
- Foster local champions – ideally local smokers – to engage with other smokers and reinforce positive social norms – prompt card example.
- Provide prompts for particular behaviours, e.g. *Don't be a Tosser! Put it in the bin.*

Resources:

Prompt cards and other collateral are available in the litter library.



NSW Quitline Services

The NSW Government is also committed to reduce smoking and improving health outcomes. Project collateral does include links to the NSW Quitline 13 7848 (13 QUIT) and iCanQuit website to support reduced smoking.

Preventing cigarette butt litter: step by step

Step 11: Enforcement

Action:

Initiate a mix of soft and hard enforcement strategies to establish new norms.

Guidance:

Although littering is illegal and attracts a fine, smokers' perceived risk of being fined is very low. Soft enforcement can involve placing signs, or having conversations with smokers, to inform them of the possible fines. This warns smokers and gives them the motivation to reconsider their actions. For some individuals, soft enforcement may not be effective enough, so hard enforcement may be required. This involves issuing infringement notices. You should engage with your local council rangers to support your enforcement strategy.

As well as targeting littering, interventions should deter smoking in banned areas. Begin directing smokers to smoking zones, followed by fining smokers who continue to smoke in non-smoking areas.

Resources:

Posters and stencils are available in the [litter library](#).

NSW Health has a range of Smoke-free signage and resources available to enforce non-smoking locations – www.health.nsw.gov.au/tobacco/Pages/smoke-free-resources.aspx



Preventing cigarette butt litter: step by step



Stage 3

Review, refine
and reward

Reviewing progress and measuring impacts of interventions will provide lessons for future improvements to local practices.

Step 12: Reward positive behaviour

Action:

Recognise and reward smokers who are doing the right thing and reinforce positive behaviour and promote achievements in reducing cigarette butt litter.

Guidance:

An increase in feeling valued and recognition of work can reduce butt littering behaviour. This can be done through publicising positive results, having positive conversations with smokers or other creative means such as vouchers

Develop a case study to showcase your results and consider promoting achievements in your local workplace or local media.

Resources:

Contact litter.prevention@epa.nsw.gov.au if you would like case study templates.



Step 13: Monitoring and evaluation

Action:

Complete further Butt Litter Checks during and after interventions to identify the project's impact.

Guidance:

It is recommended that Butt Litter Checks be undertaken

1. at the baseline
2. during the pilot phase
3. directly after interventions are complete
4. three to six months after the end of the program
5. once a year, as part of an ongoing review.

You can send completed Butt Litter Checks to litter.prevention@epa.nsw.gov.au

Make sure to capture feedback from non-smokers to minimise conflict between smokers and non-smokers.

Resources:

Butt Litter Check guidance and resources are available [here](#).

Preventing cigarette butt litter: step by step

Issues and troubleshooting

Scavenging

Some people scavenge cigarette butts and filters from butt bins and use them to make a 'new' cigarette. This poses health risks including the spread of germs and infectious diseases such as influenza and oral herpes. Cigarette butt bins must be appropriately fixed into the ground or wall to minimise the likelihood of being broken into.

Resources:

Contact litter.prevention@epa.nsw.gov.au for advice on appropriate butt bins to use in high risk areas and other guidance on securing butt bin infrastructure.



Resources

Further tools, resources and information to assist with your projects are available online. These include:

- [Cigarette Butt Litter Research Reports and Videos](#)
- [Butt Litter Check](#)
- [Litter Prevention Kit](#)
- [Local Litter Check](#)
- [Litter Prevention Grant opportunities](#)
- [Case Studies](#)

