

# What 'works' behaviourally to reduce contamination of recycling at the kerbside?



## RAPID EVIDENCE AND PRACTICE REVIEW - SUMMARY OF FINDINGS

Following is a brief summary of findings from a 35-page rapid evidence review on the above topic, one of three research themes being explored by BehaviourWorks Australia and its partners (below) as part of a Waste and Circular Economy Collaboration. The review supports the implementation of the 2018 National Waste Policy. The full review is available by request.

### What's the problem?

Australian kerbside recycling schemes were severely disrupted in 2018 when China and other countries, which previously accepted co-mingled waste, decreased the proportion of non-recyclable "contamination" in materials exported to them.

Deciphering what materials constitute "contaminants" in any given recycling scheme is contextually-driven and affected by a range of policy, economic, technological and logistical factors that can vary on a council-by-council basis.

Given that contamination is an outcome - not a behaviour - correct sorting is just one behaviour we want people to adopt, however. We also want Australians to purchase fewer hard-to-recycle products and packaging, clean and separate packaging and deliver plastics to an appropriate destination. In other words, reducing contamination depends on dozens of preferred behaviours and schemes that vary across states. So, 'what works?'

### What did we do?

We conducted a rapid evidence review on the effectiveness of interventions in reducing contamination and encouraging correct recycling at a household level.

The review aims to support local action by presenting information which the Department\* and others can use to develop effective programs and communications aligned to the 2018 National Waste Policy.

### What did we find?

The findings most relevant to recycling managers and policymakers are:

- Behaviourally-focused communications will most improve recycling outcomes where schemes make preferred behaviours as simple, easy and consistent as possible.

More over ...

### Why conduct a rapid review?

Assessing the current state of research on a topic - what is already known about it and how extensively it has been researched - provides a solid foundation from which to make informed decisions.

BehaviourWorks' researchers are trained to identify the most reliable sources of knowledge and data and translate those findings into actionable insights. For this review, the team chose a Rapid Review methodology, focusing on publications that have already reviewed a body of evidence. They also conducted a practice review to identify best practice, recent innovations, issues and opportunities as well as unpublished research/analysis. For this project:

- 1,306 papers were considered
- 137 papers were included
- 6 narrative and 2 systematic reviews represent the primary source
- 17 waste educators and communicators were also interviewed.

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## SUMMARY (page 2)

- Where contamination is an issue, specific, tailored, timely feedback such as bin tags and demonstrations from trusted relevant messengers may be effective in reducing it.
- Scheme harmonisation would significantly reduce the complexity of communications about correct behaviours.
- Recycling behaviours are affected by a wide range of internal, interpersonal and contextual characteristics.
- Effective, behaviourally-focused communications need to be tailored to the specific characteristics of existing schemes, populations, behaviours and intended outcomes.
- Given the complexity, tailoring/testing interventions before scaling may reduce unintended outcomes.
- Communication of scheme attributes, awareness raising, building perceptions of personal efficacy and norms can all stimulate cooperation, but they can interact in complex ways if not tailored to the audience and scheme.
- Interventions aiming to improve the convenience and ease of preferred recycling behaviours are among the most effective.
- Personalised, social demonstrations of recycling behaviours are also effective.

## Further

- It is not easy for users to identify the 'right thing' to do. Programs involve a mix of local government and private players, product/packaging designers and retailers, all of which communicate preferred recycling behaviours/information in different ways.
- Schemes are not necessarily designed to optimise correct recycling. Cost, logistics, commercial considerations, worker safety and other characteristics play a role in how things work and how households interact.
- There is limited knowledge translation between research, policy and practice in this area.

Given the above, knowledge sharing and applied trials of 'what works, why, for whom and under what circumstances' could support knowledge translation and the adoption of effective solutions.

## Behavioural insights

All things being equal, favourable environmental, social, and political beliefs and preferences can facilitate cooperation with waste goals, but contextual factors like limited space and time can constrain cooperation.

## National leadership

There were strong calls for leadership at a state or national level. Opportunities include:

- Assist State and Local Governments to make the recycling system easier and more convenient.
- Increase consistency in both scheme characteristics and communications within and across states.
- Boost education and learning.
- Engage brand owners, retailers, industry groups and regulatory bodies.
- Invest in promising behavioural approaches.
- Support and build capacity in local councils.
- Champion waste educators.

## Implications for communicators

- 'Persuasive' communications campaigns rated highly for effectiveness among both the published literature and practitioners, but are more likely to succeed if tailored to local contexts.
- A national education campaign making it clear what is - and isn't - accepted in kerbside bins could help.
- Mass communication should aim to create a supportive environment for local behaviour change by promoting aligned beliefs, values and attitudes, but avoid conflicting directions to local scheme requirements.
- A second tier of communications and resources could be shared and selectively drawn on (as appropriate) by local waste educators.

[www.behaviourworksaustralia.org/waste-collaboration](http://www.behaviourworksaustralia.org/waste-collaboration)  
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*\*BehaviourWorks is now collaborating with 20 local governments to conduct a series of experiments testing preliminary ideas and field trials around these topics.*