

Button Battery Safety Strategy

Addressing the risks associated
with unsecured button
batteries in the home.

September 2021

**“For me and other young
parents this is sobering
and alarming.”**

**Every parent of young
children needs this
information urgently.”**

Female / 18-29 years

Mobium Research Aug 2021

Acknowledgements

This Button Battery Safety Strategy is the culmination of research and work conducted over the period January 2021 to September 2021 by representatives from:

- Australian Competition and Consumer Commission (ACCC)
- Battery Stewardship Council (BSC)
- Australian Battery Recycling Initiative (ABRI)
- Kidsafe Australia
- National Retail Association (NRA)
- Queensland Injury Surveillance Unit (QISU)
- Republic of Everyone
- Mobium Group.

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The Battery Stewardship Scheme is an Australian Government Accredited Product Stewardship Scheme.



**Australian
Government
Accredited
Product
Stewardship
Scheme**

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1. Overview

The Battery Stewardship Council (BSC) is a not-for-profit organisation formed in 2018 for the purposes of establishing a Product Stewardship Scheme for used batteries. In 2020 the BSC received ACCC¹ authorisation to operate the Battery Stewardship Scheme. A condition of this authorisation is the formation of the Button Battery Advisory Group (BBAG) and the development of this Button Battery Safety Strategy.

The BSC is the governing body responsible for the development of the Battery Stewardship Scheme, now known as B-cycle that will be rolled out across Australia in January 2022. The safe and effective collection and recycling of button batteries is a key component of the Scheme launch.

1.1 The problem with button batteries

In Australia, one child a month is seriously injured after swallowing or inserting a button battery, with some of them sustaining lifelong injuries or fatality. In Australia and globally, there is a growing record of injuries and deaths from button batteries.

Button batteries pose a severe injury risk, particularly in children aged 0–5 years. Young children are at the greatest risk due to their narrower oesophagus and tendency to place small objects into their mouths, ears, and noses. The safety risk to children arises when they can get access to button batteries. Children can access button batteries in a variety of ways, including:

- products with battery compartments that are not secure
- poor quality products which release button batteries when dropped or broken
- spare batteries not being kept out of reach around the home
- used batteries not being stored properly
- used batteries not disposed of properly.

1.2 A complex problem to solve

In addition to this safety risk to children, button batteries present a further risk when disposed of via the household waste stream. Although the disposal of button batteries in the household waste stream is an effective method to reduce the health risk it does increase the risk for fires in the waste stream.

As the BSC rolls out the B-cycle Scheme across Australia it is well placed to safely redirect batteries from the general waste collection to secure storage and recycling for the quick removal of button batteries from the home.

¹ Australian Competition and Consumer Commission

1.3 The path forward

The Button Battery Safety Strategy seeks to establish a plan of action that will deliver on specific objectives by focussing on filling the gaps not already covered by other programs. It is recognised that topics such as new battery packaging and labelling are already subject to action by the ACCC and are outside the scope of this document.

To address the risk factors, the BSC proposes that the Button Battery Safety Strategy focusses on the following strategic objectives.

1. **Enhance awareness** through a campaign focusing on the human and environmental risks associated with button batteries and the importance of safe recycling.
2. **Change behaviour** through a program to educate the community with specific, action-oriented steps focused on the improvement of button battery safety throughout the button battery lifecycle.
3. **Develop storage and container protocols** to ensure safe and secure management of used button batteries in the home and during transport to recycling drop off points.

It is the recommendation of the BBAG that the BSC take the lead role in implementing these objectives in close cooperation with members and the ACCC, the Australian Battery Recycling Initiative (ABRI), Kidsafe, and the Queensland Injury Surveillance Unit (QISU). In addition, the BBAG should continue to provide oversight and advice on the implementation of this strategy.

2. Strategic objectives

2.1 Aim

The aim of the Button Battery Safety Strategy is to mitigate the risks associated with button batteries by addressing the root causes. The following table highlights the risks and root causes to be addressed.

Risks	Root cause
Ingestion and/or Insertion	Unsecured Batteries (either new, in-use, or used)
Fire (either by short circuit or self-combustion)	Inappropriate Disposal of Batteries (either via household waste or recycling)

The strategy aims to:

1. enhance community awareness and facilitate behavioural change. This behavioural change will focus across the community to prevent the ingestion and/or insertion caused by unsecured button batteries or fires caused through the inappropriately disposed of button batteries
2. inform industry as to the requirements and protocols for the design and manufacture of safe child resistant containers for button batteries
3. facilitate effective & environmentally sound recycling of used button batteries.

2.2 Scope

The scope of the Button Battery Safety Strategy is to focus on unsecured button batteries in the home with specific attention to the storage of new button batteries, the replacement of used batteries, and the collection and recycling of used button batteries.

An unsecured button battery can be described as a new or used button battery currently in the home that is not secured within child-resistant product packaging, a product with an approved securing method, or a child resistant container appropriately designed for storage and recycling.

2.3 Strategic objectives

The BSC Button Battery Safety Strategy is a plan of action that identifies deliverables and outcomes for the following elements.

1. **Enhance awareness** through a campaign focusing on the human and environmental risks associated with button batteries and the importance of safe recycling.
2. **Change behaviour** through a program to educate the community with specific, action-oriented steps focused on the improvement of button battery safety throughout the button battery lifecycle.
3. **Develop storage and container protocols** to ensure safe and secure management of used button batteries in the home and during transport to recycling drop off points.

Underpinning these objectives is a robust performance measurement process to evaluate the success of the strategy and to determine the need for adjustment and/or further improvement.

3. Strategic principles

Underpinning the strategic objectives of this Button Battery Safety Strategy are the following principles. The BSC will adopt these principles in all activities associated with the development and delivery of outcomes and during all engagement and collaboration with stakeholders.

3.1 Action oriented

Enhancing awareness and changing the behaviour of Australian households is the cornerstone of the Button Battery Safety Strategy. The outcomes of this strategy must be practical, and action oriented in nature and should be easy to learn, simple to apply, easy to remember, and able to be repeated.

3.2 Research based

Actions and outcomes developed in-line with this strategy are to be based on quantifiable consumer-based research. Periodic research will be conducted to assess progress and inform future direction of the Button Battery Safety Strategy.

3.3 Continuous improvement

Establishing a cycle of Plan – Do – Check – Act that is founded on sound consumer research is a proven methodology to making lasting change. The concepts of continuous improvement are to be intertwined within the fabric of the strategy.

3.4 Stewardship and collaboration

There are currently various activities underway to address safety aspects with respect to button batteries that are beyond the scope of this strategy. It is important that actions undertaken within the scope of this strategy do not contradict related initiatives.

Changing behaviour requires significant investment from multiple organisations and agencies. This strategy recognised the importance of:

- bringing together the supply chain and promoting collaboration between all stakeholders
- developing common and consistent messaging to be used as the basis of awareness and communication activities.

In addition, this strategy will draw on the best available experience with respect to mitigating button battery risks. Collaboration with Industry, government departments and agencies, consumer associations, health professionals and other entities within relevant fields will be encouraged.

4. Consumer awareness and behaviour

In August 2021, Melbourne-based market research firm Mobium Group surveyed 1,023 adult Australians aged 18 – 70+. The survey was designed to understand the general awareness of button battery health risks and mitigations. Additionally, it was designed to understand the current behaviour with respect to replacement and disposal of used button batteries.

The research findings tabled in this section of the report set the basis for the development of the strategic actions.

4.1 Prevalence of button batteries within the household

When asked to pick from a list of 13 common items 99% of Australian households indicated that they had at-least one item. When asked to estimate the number of items in their homes that use button batteries the majority (80%) indicated that they had 5 or less items. However, based on further analysis, it is evident that households under report the number of items in their homes. On average, Australians have an estimated average of 5.8 items containing button batteries within their households.

With 9.5 million households in Australia² and with an estimated average 5.8 items with button batteries per households there is currently **55,000,000 products with button batteries in households.**

85% of respondents reported that they store new button batteries in the home. However, there was no indication in the research as to how many new button batteries are being stored in the home. Assuming the minimum number is one new button battery being stored in the home there is **at least 8,000,000 new button batteries in households.**

5% of respondents indicated that they store used button batteries in the household and on average they store 7.2 button batteries. This would suggest that there are **at least 4,000,000 used button batteries in households.**

The following table aims to highlight the potential scale of the risk presented by button batteries in the home. With 1.9 million children in Australia* between the age of 0 to 5 years there are **35 button batteries per child currently in households** that present a potential health risk.

² Australian Bureau of Statistics (ABS) Census Data

Estimated quantity of button batteries in households (Based on research findings)	
New button batteries stored in homes	8,000,000
Products with button batteries in homes	55,000,000
Used button batteries in the home	4,000,000
Number of button batteries in the home	67,000,000

Figure 1. Potential quantity of button batteries in the community

4.2 Replacing button batteries: knowledge & behaviour

Most adult Australians (82%) have previously replaced a button battery. When provided with 6 'best practice' steps to replace a button battery most say that they undertake some of the measures. The biggest action gap relates to not taping battery terminals.

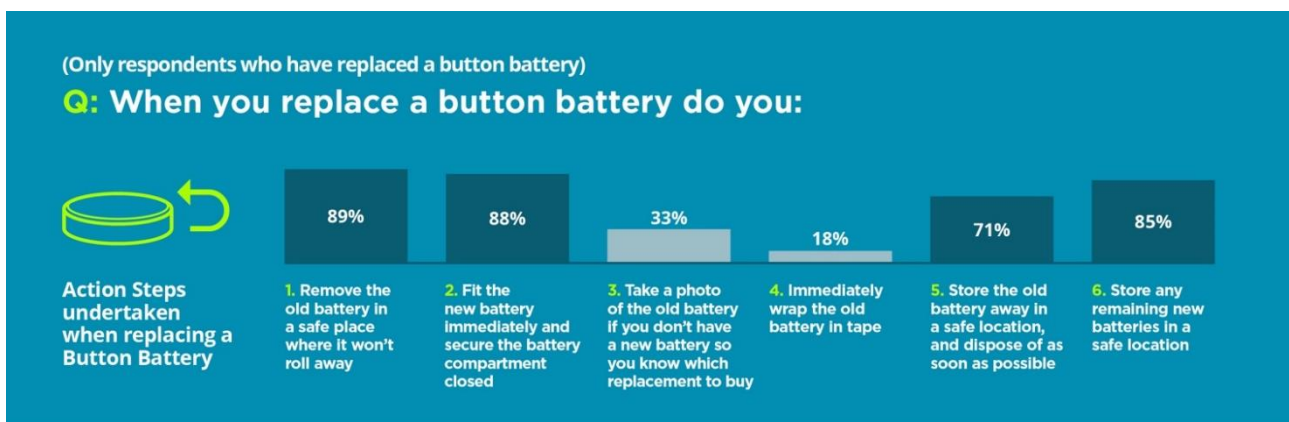


Figure 2. Action undertaken when replacing a button battery

4.3 Used button battery disposal: knowledge and behaviour

The majority of Australian adults regularly dispose of their used button batteries through the household waste stream- either into the rubbish or curb side recycling bin. 63% in total say that they usually discard their used button batteries in this manner.

Only a small proportion (5%) claim to store their used button batteries at home. 27% indicate they usually take their used button batteries to a battery drop off point. However, it is reasonable to assume that the majority of those batteries recycled are stored in the home for some period of time prior to being dropped off.

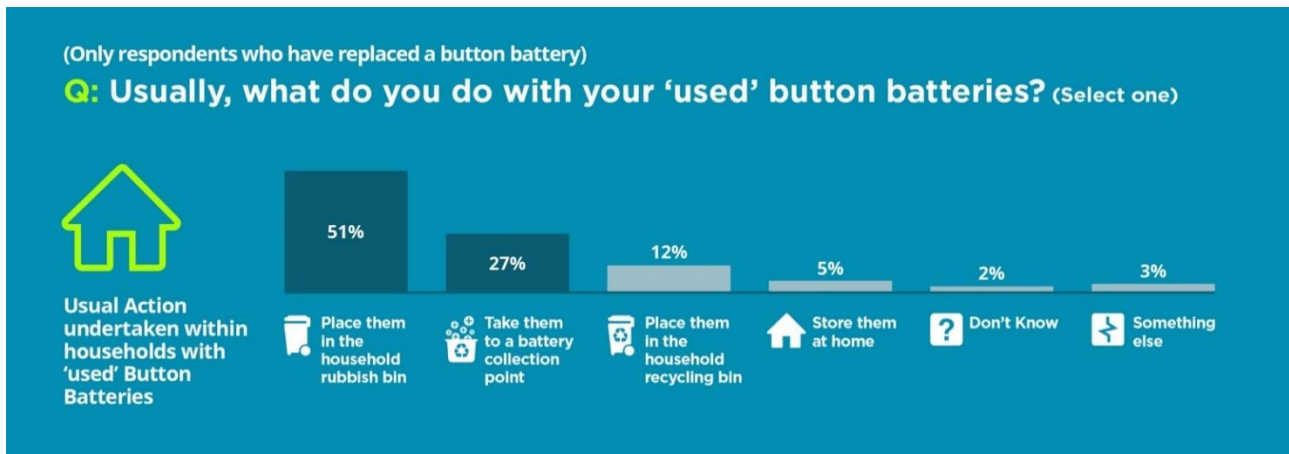


Figure 3. Action taken with used button batteries

Amongst those households storing used button batteries at home, each has on average 7.2 at their location. The number of batteries stored varies by household.

Many who keep used button batteries at home store them over an extended period of time. 58% say they typically store their button batteries for longer than a month, and 44% said for a year or more.

When asked why they store used button batteries at home the major reason cited was because they don't want to dispose of them in the household waste stream. 32% say they do not want to throw their used button batteries in the rubbish bin, another 30% indicated they are unaware of how to correctly dispose of used button batteries. 30% of those storing at home claim that they are stockpiling them to take to a battery drop off point in the future.

Others believe their stored batteries they may have future utility with 27% saying it was because they were 'not quite dead' & 16% thought that they 'might be useful again'.



Figure 4. Why do you store button batteries at home?

Those who do store used button batteries within their household environment typically either keep them in the house or in an external location such as garage or shed. Drawers are an often-used depository in the kitchen, study, or desk. Those who store used button batteries often use jars, plastic bags, boxes, and other containers.

4.4 Awareness of button battery hazards and safety

Almost 6 in 10 Australian adults indicate that they are aware that used button batteries pose some risk with many detailing multiple hazards. Grouping these responses into categories show that the known risks, hazards, or dangers fall into two high-level threads – personal safety issues and environmental consequences.

The primary personal safety hazard cited was swallowing / ingestion concerns which had the highest overall awareness of all concerns. Environmental impacts mentioned included used button batteries leaking and leaching, exploding, and releasing chemicals.



Figure 5. Awareness of button battery hazards

4.5 Safe in-home storage

When it comes to the safe storage of used button batteries within the home, Australian adults typically exhibit low levels of understanding of the potential mitigation options.

From the safety options provided, just over half believed storing button batteries in a secure container is the most appropriate approach and 27% believed storing batteries separately from other metallic items was a prudent safety measure. One in five indicated taping the battery terminals reduced risks while 28% thought the safest approach was to not store in the home.

Just over one in ten said they felt they didn't know how to safely store a used button battery at home.



Figure 6. Storing used button batteries in the home

4.6 Knowledge of and interest in battery recycling

More half of all adult Australians surveyed indicated that they did not know that most used button batteries could be recycled if taken to an approved drop off point.

31% said they had previously taken used batteries to a battery drop off point for recycling.

Those who have taken batteries for recycling have generally found locating a collection site easy (63%). For those who have never previously recycled used batteries at an approved drop off point, the vast majority say that they are not aware of where to take them in their local area.

Once respondents were provided with information about used battery recycling programs the vast majority of battery users suggested they would consider taking used batteries to a program drop off point – 59% indicated that they were very likely to participate. Such programs show a high level of interest across the community with more than 70% of each cohort saying that they were very likely or likely to take part.



Figure 7. Propensity to recycle used batteries

4.7 Button battery safety awareness and attitudes

Only a quarter of adult Australians said that they were previously aware that taping button battery terminals was a relevant safety measure.

Once provided with information about the rationale and benefits of taping, a large majority of respondents indicated that they would start undertaking this precaution within their household. The research indicates that most of the Australian community show some willingness to tape button batteries in the future with robust levels of intention amongst genders, within all age cohorts and across geographic locations.

There is a stronger level of intent to tape batteries amongst the most vulnerable households surveyed. Over half of the cohort with children aged 5 or under in the home said they are very likely to tape button batteries.

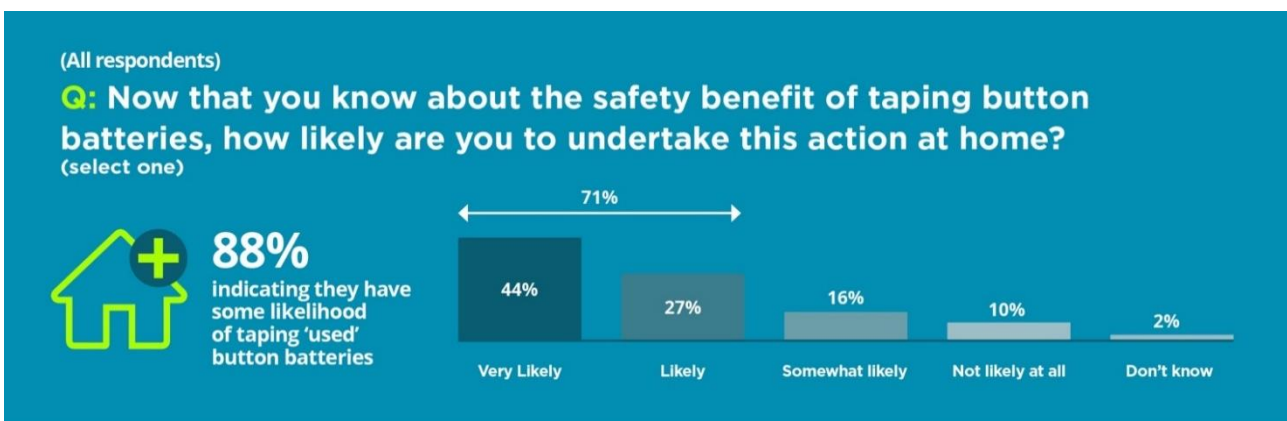


Figure 8. Propensity to tape button battery terminals

4.8 Used button battery storage container: feedback and intention

The overall response to a proposed used button battery household storage container exhibits a strong positive bias. The vast majority of those surveyed believe a container is a good idea and embrace the concepts of a secure locking feature and portability for secure storage.

Importantly, over 70% of respondents believed that the button battery storage container could be useful within their household.

Overall, there is considerable interest in the proposed button battery storage container amongst Australian households. In aggregate, 64% say they are very likely or likely to consider using one.

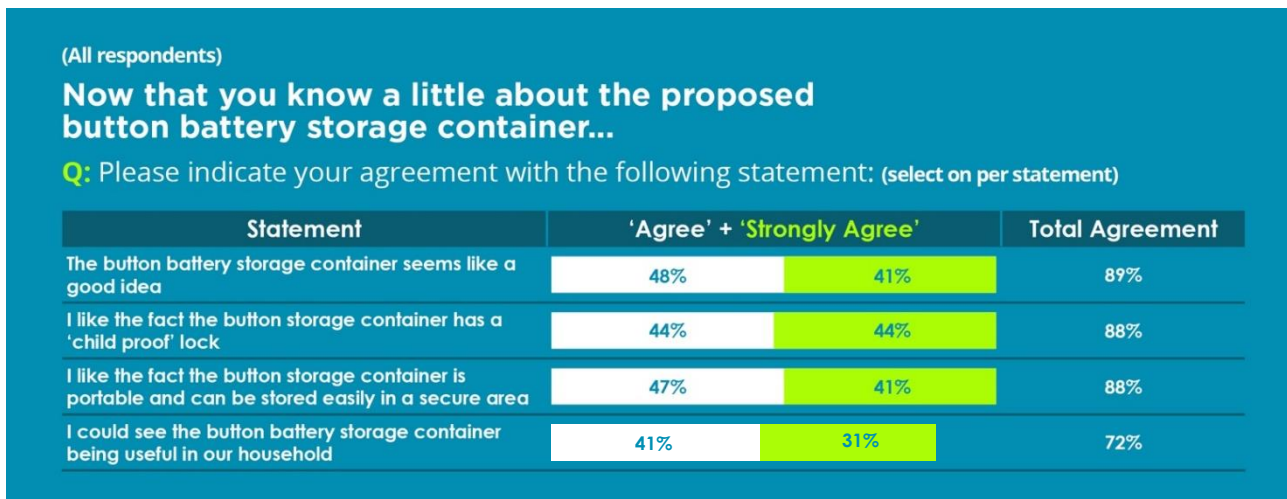


Figure 9. Propensity to use a secure storage container

5. Strategic action plan

To address the health and safety risks of button batteries, and to focus on delivering strong environmental outcomes, the BSC is proposing the following objectives. These objectives take into account the current status of community understanding and behaviour.

5.1 Enhancing awareness

Ensuring there is a strong awareness about unsecured button batteries and the risks they present to the community is essential to ensure that any education program is effective in changing behaviour.

GOAL: Enhance awareness through a campaign focusing on the human and environmental risks associated with button batteries and the importance of safe recycling

DELIVERABLES

Develop awareness campaigns focused on specific outcomes.

Deliver awareness campaigns via appropriate media to reach the required audience and general community.

Conduct periodic and continuous research to assess changes in community awareness over time.

Ensure consistency between the messaging in the awareness campaign being developed and the messaging from other entities and/or programs. (e.g. ACCC, B-cycle etc.).

OUTCOME

The recipients of an awareness campaign should be able to:

- identify the scope and scale of button batteries in the home be they new, in product, or used button batteries

Example of key messaging

"Button Batteries are the hidden dangers in your home, do you know how many you have?"

- ascertain if a button battery is securely contained within the product

Example of key messaging

"How secure are the button batteries within the gadgets in your home? Do you know how to check?"

- understand and explain the risks associated with unsecured button batteries in the home

Examples of key messaging

"Button Batteries in the home can cause injury or death. Do you know what the risks are?"

"Button batteries can cause fires! Do you know how to prevent them?"

- understand the importance of safe collection and recycling of used button batteries

Example of key messaging

"Recycling button batteries reduces the risk of injury or fire. Understand why."

5.2 Change behaviour

Providing the community with short sharp targeted programs that communicate simple, actionable, repeatable, and timely, messages and actions designed to change behaviours is the focus of this Strategy Action.

GOAL: through a program to educate the community with specific, action-oriented steps focused on the improvement of button battery safety throughout the button battery lifecycle.

DELIVERABLES

Develop practical, action-oriented programs focused on changing behaviours in dealing with unsecured button batteries.

Deliver programs and material via the appropriate media to reach the desired audience.

Conduct periodic and continuous research and evaluation to assess changes in community behaviour over time.

Ensure consistency between the messaging in the behavioural change programs being developed and the messaging from other entities and/or programs. (e.g. ACCC, Kidsafe, ABRI, QISU, and B-cycle etc.).

OUTCOME

The programs will contain simple, actionable, and repeatable step by step instructions for the recipient to be able to demonstrate how to:

- safely and securely remove, replace, collect, and contain a used button battery

Example of key messaging

"Replacing a button battery is an open and shut case, know how to do it safely."

Examples of desired behaviours

"Remove used button batteries from a product so the battery will not roll way."

"Immediately fit and secure a new button battery."

"Tape button battery terminals."

"Secure used button batteries ready for disposal or recycling."

- safely store new, unused button batteries in the home

Example of key messaging

"Unsecured button batteries are a hidden danger, know how to reduce the risk."

Examples of desired behaviours

"Secure and store new button batteries."

- safe recycling of used button batteries

Example of key messaging

"Recycling button batteries reduces the risk of injury or fires. Know how to do it properly."

Examples of desired behaviours

"Appropriately recycle button batteries?"

"Locate an accredited battery recycling drop-off point."

5.3 Develop storage and container protocols

Used button batteries present a great risk, not only in the home, but also when disposed of in the general waste or curb side recycling where they are increasingly causing fires within the waste stream.

Being able to collect used button batteries and secure them safely for deposit at an accredited battery recycling facility is very important to reduce the risk of ingestion or insertion as well as battery fires.

GOAL: Develop storage and container protocols to ensure safe and secure management of used button batteries in the home and during transport to recycling drop off points

DELIVERABLES

Provide industry intending to manufacture button battery collection containers for use in the home with guidance and protocols for standards and best practice.

Establish a "BSC approved container endorsement" program that includes a risk assessment framework for industry use. Such a framework should cover appropriate standards, test methodologies and results.

Promote safe and secure collection and containment of used button batteries in the home.

Promote safe and secure recycling practices for used button batteries.

OUTCOME

Endorse purpose-built child resistant button battery containers that meet the requirements of a "BSC approved container endorsement" program.

Provide consumers with clear guidelines via awareness and education for in-home containers to safely collect and contain used button batteries.

5.3.1 Container Protocols

To facilitate the progression and development of suitable purpose-built child resistant button battery containers the strategy sets out the following design elements, protocol recommendations, and relevant standards to inform industry and manufacture.

Design Elements	Container Protocol Requirements	Relevant Standards
Safety Standards	Compliance to existing Safety Standards.	<p><u>Consumer Goods (Product Containing Button/Coin Batteries) Safety Standard 2020 - includes for containers to store button batteries.</u></p> <p><u>ABRI Button Cell Guidelines.</u></p>
General Safety	<p>Button batteries are safely stored for transportation to an accredited recycling point.</p> <p>Risk of fire is reduced.</p> <p>The container is tamper proof</p> <p>Stored button batteries cannot short circuit.</p> <p>Labelling includes:</p> <ul style="list-style-type: none"> ▪ practical steps for reducing risks. ▪ instructions for taping used button batteries. <p>The entry slot is small enough to only accommodate button batteries.</p>	<p><u>ISO/IEC GUIDE 37:2012 Instructions for use of products by consumers.</u></p> <p><u>ISO/IEC GUIDE 41:2018 Packaging – Recommendations for addressing consumer needs.</u></p> <p><u>ISO/IEC GUIDE 50:2014 Safety aspects – Guidelines for child safety in standards and other specifications.</u></p> <p><u>ISO/IEC GUIDE 51:2014 Safety aspects – Guidelines for their inclusion in standards.</u></p> <p><u>ISO GUIDE 64:2008 Guide for addressing environmental issues in product standards.</u></p>
Poisoning	<p>Container labelling includes:</p> <ul style="list-style-type: none"> ▪ warnings of the consequences of button battery ingestion/ insertion and short-circuiting ▪ instructions for what to do if ingestion, swallowing, or insertion of a button battery occurs, including the Poisons Information Centre's phone number. 	<p><u>16 CFR Part 1700 - POISON PREVENTION PACKAGING.</u></p>
Material use and Reusable / Recyclable container post-use	<p>The material used is flame resistant or fire retardant.</p> <p>The container is easy to reuse. (if a design requirement).</p> <p>The container can be disassembled and cleaned. (if a design requirement).</p> <p>The components / materials are recyclable at its end-of-use.</p>	<p><u>UL94 Flame Resistant Plastics.</u></p>

Design Elements	Container Protocol Requirements	Relevant Standards
<p>Child Safety Standards</p>	<p>The container is compliant with child resistant packaging for pharmaceutical and non-pharmaceutical, recloseable and non-recloseable containers.</p> <p>The container is compliant with the following Toy Standards tests:</p> <ul style="list-style-type: none"> ▪ temperature testing ▪ tensile testing ▪ corrosion testing ▪ vibration testing ▪ ageing testing ▪ fatigue testing ▪ drop testing. <p>Button batteries cannot be removed when a child:</p> <ul style="list-style-type: none"> ▪ tips it ▪ shakes it ▪ drops it ▪ turns it upside down ▪ puts it in its mouth ▪ chews it ▪ knocks it ▪ uses a device like a fork or spoon to try to open it. 	<p><u>ACCC / Product Safety Australia – Mandatory Standards Toys for children up to and including 36 months of age.</u></p> <p><u>ISO 8317:2015 Child-resistant packaging – Requirements and testing procedures for reclosable packages.</u></p> <p><u>ISO 14375:2018 Child-resistant non-reclosable packaging for pharmaceutical products – Requirements and testing.</u></p> <p><u>BS EN ISO 8317:2015 Child-resistant packaging. Requirements and testing procedures for reclosable packages.</u></p> <p><u>CAN/CSA-Z76.1-16 Reclosable child-resistant packages.</u></p> <p><u>CAN/CSA-Z76.2-00 (R2010) Nonreclosable Child-Resistant Packages.</u></p> <p><u>AS/NZS ISO 8124.1:2019 Safety of toys Safety aspects related to mechanical and physical properties.</u></p> <p><u>AS 5014-2010 Child-resistant packaging - Requirements and testing procedures for non-reclosable packages for pharmaceutical products (EN 14375:2003, MOD).</u></p> <p><u>EN 71-1:2014+A1:2018 Safety of toys - Part 1: Mechanical and physical properties.</u></p> <p><u>ASTM F963 – 17 Standard Consumer Safety Specification for Toy Safety.</u></p>
<p>Durability, Mobility, Size & Storage</p>	<p>The container is sufficiently robust to withstand hazards, storage, and handling over time.</p> <p>The container can withstand reasonable high temperatures without damage/breakage or risk of fire.</p> <p>The container can fit a reasonable number of button batteries.</p> <p>The containers size and/or maximum weight easily accommodate storage in spaces away from children.</p> <p>The container is easy to handle by users.</p>	<p>See general testing standards above.</p>

Note: not all documents are freely available – technical standards may need to be purchased from the appropriate Standards organisation.

5.4 Additional actions

5.4.1 Product stewardship for batteries

The BSC through the introduction of the B-cycle Scheme, is accountable to bring together the battery supply chain for the overall Stewardship of batteries. The BSC will therefore be establishing protocols and standards and will administer accreditation and audit programs specifically focused on the collection and recycling of used batteries.

Such work, which is beyond the scope of this document, will be undertaken by the BSC and will include specific requirements for button batteries from the collection at an accredited drop-off point through to the collection, sorting, and recycling processes.

BSC will draw on the work of this strategy in the development of the B-cycle Scheme. The effectiveness of the B-cycle program, with respect to the growth of drop-off point and battery collection, will be assessed as a performance measure relevant to the success of the roll of this strategy.

5.4.2 Injury reduction

The primary problem being addressed by this strategy is a reduction in incidences of injury or death caused by button batteries. To this end an appropriate measure of the success of this strategy is to assess the change in incident numbers of button battery injury as the action plan is rolled out and the behavioural changes are adopted across the community.

6. Target audience groups

Enhancing the general community’s awareness of the risks associated with button batteries and changing behaviour to mitigate those risk is most important.

However, identifying specific target audiences to provide special attention to and focus efforts has the potential to yield more effective outcomes.

The following table highlights those target audiences most likely to reach those sectors of the community with the potential to influence and support the dissemination of information and education materials for maximum impact.

Target audience group	Includes
Community sectors	Parents, carers, foster parents, grandparents, community elders, mother’s groups and play groups.
Health professionals	Emergency staff, nurses, midwives, allied health professionals, physiotherapists, GPs, pre-natal classes, chemists.
Community organisations	Diabetes associations, universities, animal rescue and welfare organisations, relevant NGOs, P&C’s, schools and teachers, kindergartens, and early childhood learning.
Industry sectors	Manufacturers, retailers, marketing professionals, event organisers, venues, and industry associations. Manufacturers and retailers of baby related products and toys.
Government	Childcare services, aged care services, health care services, and disability services.

7. Performance measurement

Establishing an initial and ongoing performance measurement process will be critical to assess the overall success of the Button Battery Safety Strategy.

In addition, such a measurement process allows for aspects of the strategy to be adjusted, altered, changed, or removed to ensure the strategy continues to deliver the desired results over time.

The following table indicates the proposed measurement process. This table may be revised as the strategic action deliverables are completed or implemented to ensure effective measures are applied.

Key result area	Key performance indicators	Measurement process
Community awareness	Access to and distribution of Awareness Campaigns.	<ul style="list-style-type: none"> Media reach. Number of social media hits. Campaign attendance.
	Increase in community awareness of the: <ul style="list-style-type: none"> scale and scope of button batteries in the home risks associated with unsecured button batteries safe & effective disposal and recycling. 	<ul style="list-style-type: none"> Consumer research.
Behaviour change	Access to and distribution of behavioural change programs.	<ul style="list-style-type: none"> Media reach. Number of social media hits. Campaign attendance.
	Change in community behaviour towards: <ul style="list-style-type: none"> used button battery replacement new button battery storage used button battery storage and recycling. 	<ul style="list-style-type: none"> Consumer research.
Secure containers	Community attitude towards secure and safe collection and containment protocols for used button batteries.	<ul style="list-style-type: none"> Consumer research.
	Use of the collection container protocols by industry to supply used button battery containers.	<ul style="list-style-type: none"> Containers supplied.
Recycling effectiveness	Growth in: <ul style="list-style-type: none"> battery drop-off points used battery collection rates. 	<ul style="list-style-type: none"> BSC data.
Injury reduction	Decrease in incidents of ingestion and insertion of button batteries.	<ul style="list-style-type: none"> National data collection.