

Under Fives water safety and the Bathmat campaign

History and effectiveness – Sheridan Bruce

Introduction

This paper outlines the development of the Bathmat Campaign from 2010 and reports on the biannual market research on the effectiveness of the campaign, over the past ten years, to improve parents and caregivers' knowledge, attitudes and behaviour of water safety for their little ones. Further, the Under Five drowning problem is described over a twenty year period. Conclusions are made about whether the bathmat campaign has impacted the reduction in Under Five drownings over the past ten years. And finally, the one question, 'how do we know it works' has been deconstructed to better inform future delivery of drowning prevention strategies and interventions with Under Fives.

The drowning problem

Fatalities

Twenty years ago, in 2000, the average rate for Under Fives fatal drowning was 12 children per year. Of these, there were an average of eight (67%) who drowned around the home environment which included baths, pools, buckets and other vessels.

Eleven years on, in 2011, the average rate had dropped to eight per year (although in that year, there was 12 preventable fatalities). Five (63%) of these occurring around the home.

In 2019, the average rate for Under Five drownings was four per year, of which two (50%) occurred in the home environment. And in the last five years (2015-2019), there has been one bath drowning of an Under Five. Over this five year period there were 20 drowning deaths made up of 10 home pool and 10 Inland Still Waters (ponds, lakes, drains) drowning deaths.

Table 1 describes the average drowning rate, in the last two ten year periods. Preventable fatality trends are described by location of incident:

Public pools, thermal pools	strongest downward trend
Bath	strong downward trend
Home pools, portable pools, spa pools	downward trend
Buckets, drains, ponds, 'domestic location	steady
Natural water	slight upward trend

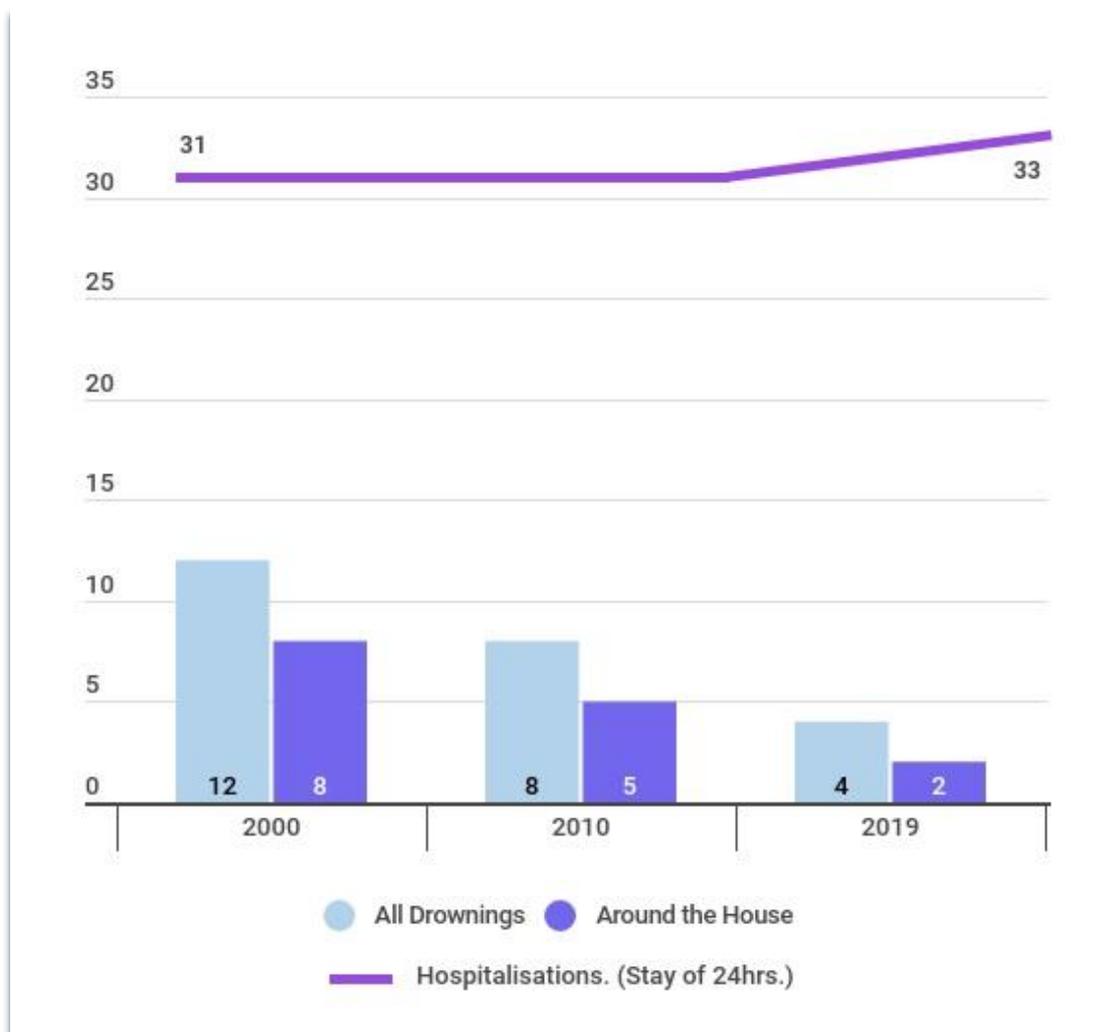
Table 1. Under Five Fatalities 2000 – 2019 by environment

Environment	Preventable Fatalities Since 2000	Average per year, 2000-11	Average per year, 2012-19	Ratio
Public pools, thermal pools (none after 2011)	8	0.64	0.11	17%
Bath	21	1.45	0.56	38%
Home pools, portable pools, spa pools	49	3.00	1.78	59%
Buckets, drains, ponds, domestic location	35	1.82	1.67	92%
Natural water	37	1.73	2.00	116%

Hospitalisations

Hospitalisations can't be compared on the same basis, because DHBs which collect the data don't specify the location of the incident. The number of hospitalisations per year stayed fairly steady from time of data collection in 2003 – averaging 31 in the period from 2003 to 2010 and 33 in the period from 2011 to 2019. See Graph 1 below for fatalities and hospitalisations over the period discussed.

Graph 1. Fatalities and hospitalisations trends over the 20 year period 2000 to 2019.



Preschool drowning review committee

Ten years ago, this committee, led by WSNZ, developed an Under Fives strategy which has been in place ever since. The strategy forms the core of WSNZ policies, communications and marketing for Under Fives water safety. Members of the committee were influential advisors in childhood safety including Sue Campbell, Plunket New Zealand; Ian Hassell, Institute of Public Policy; Nick Baker, Child and Youth Mortality Review Committee (CYMRC); Moses Alatini, Safekids and members of the Child Youth & Families Education Service. For details about the work of this committee, see Appendix 1.

The value of the bathmat campaign

The bathmat campaign is a social marketing campaign which acts to improve parents' knowledge, attitudes and behaviour around water safety for Under Fives over a period of time.

Social marketing differs from marketing in a number of ways. Where marketing campaigns are relatively easy to implement and can create high reach and awareness through mainstream media channels over relatively short periods of time, they are more informational and transactional focused rather than implemented to address systemic attitude and behaviour change.

Social marketing takes a more pragmatic approach and teases out barriers and benefits based on audience predilections and employs multiple tools and channels, possibly over a long period of time, to influence sustainable and enduring behaviour change.

In the case of the bathmat campaign, market research has been employed to monitor the impact of the campaign on parents of Under Fives' knowledge, attitude and behaviour over a period of time.

How the principles of social marketing work with the bathmat campaign

The Transtheoretical Model or Stages of Change Model identifies parents of babies and children as information seekers when it comes to child rearing, child education, health and wellbeing. Further, this audience will seek and respect information from high trust environments such as specialists and those with influence, as well as peers.

Not only is the bathmat campaign an information campaign, Plunket nurses are the instruments of influence and information who provide comfort and certainty about best practice water safety in a high trust environment. – a Plunket nurse visit or clinic.

It is an evidential campaign where measures of use, message recall and water safety behaviour are gauged biannually across changing samples of between 500 and 1000 respondents. The survey itself is a social marketing tool which reinforces the objectives of the campaign while providing opportunity to deliver another water safety message.

The campaign allows parents to view themselves as change makers which makes demands of their personal responses and accountabilities, a strategy to reinforce change at the source.

The bathmat is a gift to parents providing value in an exchange relationship. Bathmats exist to reduce slipping in the bath or shower. The Plunket bathmat satisfies this need by stopping baby slipping when baby sits in the bath. It is commonly known, useful and informative.

On an ongoing basis, the bathmat is a constant reminder of water safety and parents' responsibility to be accountable and responsible for their children's health and wellbeing and acts as an instrument to improve water safety.

Systemic change can take generations and the most successful social marketing campaigns usually involve legislation as well as voluntary accountability – think seat belts, stopping smoking and speeding campaigns.

Water safety of Under Fives hasn't had the luxury of being supported by government budgets or legislatively. However we have had the benefit of time - a ten year campaign – which shows little sign of wearing out with 78% of parents using the bathmat and a supportive partner – Plunket to deliver and reinforce the campaign.

The bathmat campaign in detail

The bathmat campaign was launched in 2010 as a joint venture between WSNZ and Plunket.

The objectives of the campaign were to create greater awareness and educate parents and caregivers on the importance of water safety for young children, and ultimately reduce the drowning rate in children under five years of age.

Research undertaken in 2005 into circumstances surrounding drowning in those under 25 years in New Zealand (1980-2002)¹ (the research) concluded the following *“Drowning, although reducing in incidence is still a leading cause of death amongst NZ children and youth. Given the enormous social and economic cost of drowning and the preventable nature of those deaths, it is a problem worthy of our attention. Policy is in place to reduce toddler death in home pools, but attention needs to be given to enforcing compliance with legislation and further research would be useful to evaluate the effectiveness of this. Parents need to be educated by doctors, allied health professionals and media about the importance of supervision of infants and young children while they are near any body of water, especially in the bathtub or swimming pools.”*

The research went on to make the following key points:

- All children under the age of three years should be constantly supervised in the bath by an adult
- Children under the age of five years should not be left to supervise younger children in the bath
- All home pools need to be fenced in regulation with the Fencing of Swimming Pools Act 1987, with attention to ongoing compliance. Gates should never be propped open
- Adults need to closely supervise toddlers while they are near any body of water. Proper supervision in and around water requires a responsible adult keeping young children in their care both **WITHIN SIGHT** and **WITHIN REACH**

The bathmat campaign comprised:

- Delivery of a Bathmat by Plunket (authoritative and influential) at 5 months
- Placement of a water safety sticker at 9 months – in their Well Child Tamariki Ora booklet (constant reminder of water safety)
- Poster promotion inside Plunket clinics

See Appendix 2 for the bathmat campaign execution.

¹ Circumstances Surrounding Drowning in Those Under 25 in New Zealand (1980-2002). *Child and Youth Mortality Review Committee, 2005.*

Campaign Evaluation

For ten years WSNZ has contracted Plunket to deliver bathmats to parents of babies five months old at the Core 4 visit. Funding has dictated quantities of bathmats produced but these vary in range from 35,000 to 50,000 annually (approx. 60,000 babies are born annually).

As part of the contract with Plunket, it has been Plunket's responsibility to evaluate the penetration and impact of the campaign in market. Plunket has engaged various market research agencies over the years to measure the campaigns effectiveness.

Table 2 identifies the reach figures of those parents or caregivers who received a bathmat based on whether they used the bathmat, could recall the water safety message, were made aware of the threat water can pose and whether it changed their behaviour around water.

Table 2 Bathmat campaign evaluation.

	2011/12	2013/14	2015/16	2017/18
Use Bathmat	88%	83%	73%	78%
Message recall	67%	70%	50%	63%
More aware of threats	67%	64%	65%	62%
Change behaviour around water	43%	45%	53%	53%

These figures indicate a high to very high use of the bathmat over time and average to good recall of the water safety message. It has influenced around half of respondents to change their behaviour around water and around two thirds of respondents have become more aware of the threats water can pose to their little ones.

This information is further broken down by each bi-annual survey.

2011/12 bathmat survey by Market Pulse International. *See Appendix 3 for the 2011/12 details.*

Bathmat Campaign Evaluation	Planned	Date	Actual
2011-2012 (first year of evaluation)	Independent evaluation undertaken by mail and phone call. Evaluation objectives: To meet or surpass: - Use bathmat 35% - Message recall 25% - Change of supervision behaviour 12%	June 2012	Evaluation Completed. 58,500 bathmats delivered by Plunket at 5 month well child check: - Use Bathmat 88% - Message Recall 67% - Change of behaviour 43%

2013/14 bathmat survey conducted by Ignite Research. See Appendix 4 for details.

Bathmat Campaign Evaluation	Planned	Date	Actual
2013/14	<p>Independent evaluation undertaken by mail and phone call</p> <p>Evaluation objectives: To meet or surpass:</p> <ul style="list-style-type: none"> - Use bathmat 75% - Message recall 50% - Change of supervision behaviour 25% 	June 2014	<p>Evaluation Completed.</p> <p>45,000 bathmats delivered by Plunket at 5 month well child check:</p> <ul style="list-style-type: none"> - Use Bathmat 83% - Message Recall 70% - Change of behaviour 45%

2015/16 bathmat survey conducted Plunket. See Appendix 5 for details.

Bathmat Campaign Evaluation	Planned	Date	Actual
2015/16	<p>Independent evaluation undertaken by phone.</p> <p>Evaluation objectives: To meet or surpass:</p> <ul style="list-style-type: none"> - Use bathmat 75% - Message recall 50% - More aware of threats water can pose 50% - Change of supervision behaviour 45% 	June 2016	<p>Evaluation Completed.</p> <p>40,000 bathmats delivered by Plunket at 5 month well child check:</p> <ul style="list-style-type: none"> - Use Bathmat 73% - Message Recall 50% - Aware of threats water can pose 65% - Change of supervision behaviour 53%

2017/18 bathmat survey conducted by MM Research, contractor to Plunket. See Appendix 6 for details.

Bathmat Campaign Evaluation	Planned	Date	Actual
2017/18	<p>Independent evaluation undertaken by phone.</p> <p>Evaluation objectives: To meet or surpass:</p> <ul style="list-style-type: none"> - Use bathmat 75% - Message recall 50% - More aware of threats water can pose 50% - Change of supervision behaviour 53% 	June 2018	<p>Evaluation Completed.</p> <p>35,000 bathmats delivered by Plunket at 5 month well child check:</p> <ul style="list-style-type: none"> - Use Bathmat 78% - Message Recall 63% - More aware of threats water can pose 62% - Change of supervision behaviour 53%

The bathmat campaign's influence on drowning reduction of Under Fives

There should be little debate about the bathmat campaign being an effective social marketing instrument to improve parents' knowledge, attitudes and behaviour of water safety for Under Fives.

The question has been raised however, how do we know it works? To answer this question, we need to review the KPIs established at the onset and during the campaign, other KPIs as part of reporting, and measurers/questions which may better explain drowning reduction in Under Fives.

What could the measures of success be for the campaign?

1. Campaign evaluation objectives as detailed above – met or exceeded.
2. SportNZ accountability reporting – met or exceeded.
3. Water safety sector strategy 2020. Zero fatal drownings of Under Fives by 2020 - not met.
4. Downward trend in fatalities over time – met.
5. Downward trend in hospitalisations over time – not met.

But to be more nuanced about answering this one question a lot more constructive questions may be:

1. Does parental behaviour change as an end goal, correlate with fewer drownings?
2. What is the social value of behaviour change?
3. What is the economic cost of behaviour change?
4. Infant fatalities were tracking down prior to the campaign being implement. What were the forces in place to influence that and would that have been a continuing trend?
5. Short term vs long term drowning implications. Is a life saved as an infant as a result of the campaign, a life saved in the future?
6. What about the lives of infants lost? Did the bathmat campaign fail them? Who failed them?
7. What other tools are in market and how are all these tools working together for a compounded impact?
8. What's next after the bathmat campaign?

Clearly preventable fatal drownings over the past ten years have trended downwards while hospitalisations have shown an insignificant increase. Specifically, bath and pool drownings have significantly reduced with the problem appearing to move from inside the home to outside the home and outside the gate.

Has the bathmat campaign contributed to this reduction? Social marketing theory would say yes it has. It would say that parents and caregivers' improved knowledge, attitudes and behaviour of water safety of Under Fives, particularly around bath time has contributed to saving lives from drowning.

Appendices

Appendix 1

Preschool Drowning Review

In 2011 organisations were invited to the Preschool Drowning Review. Participants:

- Sue Campbell – Plunket New Zealand
- Ian Hassell – Institute of Public Policy
- Nick Baker – CYMRC
- Moses Alatini – Safekids
- Child Youth & Families Education

Purpose:

To provide a forum to review the current Water Safety New Zealand, Preschool Drowning Prevention Strategy and identify any new initiatives or changes to the document.

To encourage communication, sharing of information and co-operation between all invited parties to ensure the current Under Five Water Wise strategy will prevent further preschool drowning.

To make recommendations and findings to Water Safety New Zealand (WSNZ).

Under Five Strategy Review Report

Date: 13 September 2011, 10.00am – 1.00pm

Venue: Water Safety New Zealand Board Room

Present: Ian Hassell, Moses Alatini (Safe Kids New Zealand), Sue Campbell (Child Safety Advisor, Plunket New Zealand), Gabrielle McDonald (Child Youth and Mortality Review Committee)

Cory Sweeney (Water Safety New Zealand), Alexander Brunt (Water Safety New Zealand)

Review Outcomes

- 2011 has seen a dramatic rise in Pre School drowning. The review group agree that the trends over the last 10 years are consistent with the recent rise in preschool drowning. Therefore the importance of the “supervision” message and the understanding of what this means is absolutely critical.
- To create a wider picture on this age group hospitalisation data would be helpful to assess the number of “near miss” situations and what level of care was taken by the supervising adult.
- A home pool fencing compliance programme is essential to assist with supervision. As highlighted throughout the review pool fencing compliance is still one of the main causes of drowning in this age group. It is unrealistic to actively supervise children 24 hours a day, therefore emphasis on working with TLA’s to take responsibility for an inspection programme checking compliance is vital.
- Key safety messages for the preschool age group have fundamentally been focussed around supervision. However, as discussed the meaning of supervision to one can be totally different to another. Therefore a more specific definition of supervision is needed.

- Maori communities were identified as a high risk group and remain overrepresented in the drowning statistics. A specific campaign to focus on the various well child providers for Maori to distribute resources to is another priority.
- Bath time remains to be a concern and the need for the Bath Mat campaign to continue and extend its reach into other communities is imperative. Specific messages relating to bath time and age groups was also discussed with several definitions being raised.
- Community education and methods of distributing messages will dramatically improve the uptake of messages and effectively assist with the changing of behaviour around water. Moving forward we need to enhance the relationship with Plunket and the networks they have while identifying other organisations to distribute resources to young families.

Background

Water is a significant hazard for young children both inside and outside of the home. Preschool children have one of the highest drowning rates of all New Zealanders. In the last 5 years, on average, 8 children under the age of 5 have drowned in NZ annually. Many of these drowned while at home, mostly in a home pool or bath.

By the end of January 2011, Water Safety New Zealand (WSNZ) recorded six children under the age of five had drowned in New Zealand. At the time it represented nearly a quarter of the total year to date drowning toll of 26.

Evidence suggests that around 71.7% of infant drowning deaths occur because of a breakdown in supervision. Supervision defined as the three variables (attention, proximity and continuity). As a result, this makes a large number of these drownings preventable, (Lauren Petrass, Jenifer Blitvich and Caroline Finch, Lack of caregiver supervision: a contributing factor in Australian unintentional child drowning deaths 2000 – 2009, The medical Journal of Australia, 2011, pp228 – 231).

The dramatic rise in preschool drowning in such a short period of time, prompted Water Safety New Zealand (WSNZ) to conduct a review to consider the circumstances surrounding all preschool drowning deaths in the last five years. The review will examine current prevention strategies and seek enhancements and/or changes in an attempt to prevent any further drowning, of this age group.

Objectives

- Review circumstances surrounding recent preschool drowning incidents and identify any common trends.
- Discuss current U/5 Drowning prevention strategy and address any areas of concern.
- Identify opportunities to improve within the current strategy and drive any new initiatives.
- Review the current safety campaigns, drive new initiatives from a broad base enabling collaboration.

Review Summary

The review panel was provided with the following documents to consider prior to the review:

- Preschool drowning statistics 2001 – 2010
- 2011 Pre School drowning statistics

- 2011 Bath Mat Evaluation
- Current U/5 strategy
- Evaluation of the Fencing of Swimming Pools Act 1987 -Department of Building and Housing.

To view documents see Appendices

Round table discussion comments:

Until viewing drowning statistics, was unaware how quickly children got into trouble in water.

Information provided was useful but more information was needed around non compliance issues and what these were, as well as any first aid that was applied to the individual.

Hospitalisation information was needed to paint the bigger picture i.e. how many had survived near drowning situations.

A community review could be a good idea to identify communities with lack of educators, or that were at higher risk of drowning. Analysis could then be completed on drawing comparisons to levels of community education. This to identify gaps in education in certain regions, to then focus education campaigns in these areas.

Data Review Comments:

On average 5 – 10 drowning per year

425 drowning since the introduction of drownbase

Majority of preschool drowning occur in a home setting either home pool or bath

Public locations such as camp grounds and public pools are not a big feature

Lack of supervision apparent in many of the drowning

Maori identified as a high risk group

Pool access via ranch sliders a real issue for home pools

Opportunities for improvement

What is the meaning of supervision? Does it have different interpretation to different people? Ethnic groups?

Should the message be “Active Supervision” and what does that mean?

Active supervision – In the line of sight and the ability to provide immediate assistance range

Supervision is circumstantial and impossible of knowing what a child is doing 24 hours of the day, but critical during certain times and activities

Supervision should be by an adult at all times at home. 16 years old at a pool but very dependent on the person as regardless of age the supervisor must be responsible

100% supervision of children unrealistic therefore a regional inspection Policy essential for home pool fencing compliance.

Sue Campbell mentioned Plunket could assist with the education around pool fencing and its importance.

Council to be responsible for region wide compliance and inspection programmes

Educate new parents of the dangers through antenatal classes

Provide real life stories of drowning to Plunket or other parent groups to give the “shock” factor

Offer resuscitation courses to antenatal classes.

Current U/5 Strategy

The review group agreed that the trends over the last 5 months aligned with the trends of the last 5 years with the domestic setting and supervision still the required focus of this strategy. However, there was a need for clarity and a specific approach to some of the identified issues such as supervision.

Changes to the current strategy

1. “Target Market”

Parents / Caregivers / Whanau

Children under the age of five

The target market of the strategy should still focus on parents but included in the target market are:

- Well child providers
- Territorial Local Authorities
- Early Childhood Education sector.

2. “Key Messages”

The number one water safety message currently being reinforced is:

“Always supervise children near water, ALWAYS!”

Parents/caregivers are constantly reminded to:

“Maintain hand contact whilst bathing and bath time”.

Ensure any home pool is fenced in accordance with the *Fencing of Swimming Pools Act 1987* (FOSPA 1987).

To take their children to the pool for valued time together in the water to develop water confidence skills.

Historically, WSNZ has always included the key message of supervision in its media campaigns.

Key objectives remain the same but with a few key changes to the Key Messages communicated via various resources.

Bath time

- Always stay beside your children while bathing
- Don't lose sight of your children while bathing
- Keep hand contact on your BABY (U3) at all times
- Always supervise children around water always! Stay close, be constant!

Supervision

- Don't lose sight of your children near water
- Constant line of sight with your child near water
- One adult responsible for supervising at all time (what is supervision)
- Stay within grabbing distance

- Be within range of providing immediate assistance

Ian Hassell provided a document outlining the recent drowning incidents and the specific strategies that would have saved these lives (Appendix 6). Each strategy was identified in the table following.

Issues	Additions/changes	Actions
Maori	Include Maori agencies into the distribution of Bath Mats	Prioritise regions based on population and drowning and distribute Bath Mats through Well Child providers
Supervision	Define "supervision" in more detail	Define "supervision" in more detail giving required actions and include in appropriate resources
Home Pools	Emphasise importance of pool inspections and fencing compliance	Quarterly or annual updates to TLA's to update them on the drowning rates and apply pressure for them to implement an inspection programme
Bath Time	Extend distribution into Maori community Define supervision	Further define the Bath Time supervision message
Identification of water hazards	Education programme around water hazards	Increase distribution options for resources to educate adults on water hazard identification and supervision messages
Portable pools	Safety messages around portable pools	Include safety messaging in resources around portable pools. Or create a new resource to outline the danger and how to maintain these safely

Proposed Changes to current campaigns

<u>Current</u>	<u>Changes</u>
Bath mat Campaign	Distribute into Maori communities
Early Childhood Kits	Communication to all ECE centres promoting the resources
Kohanga Kits	Communication plan to promote resources Direct distribution through Maori Regional Leaders
Water safety home checklist	Distribute via ECE centres and Plunket groups such as PIN and PEPE, Antenatal or parent magazines
Water wise poster	Update and translate into Maori/Pacific languages
Pool Safe Signage	Continue to distribute to community and commercial pools
Media Campaign	Media campaign to address the identified issues and supervision message
<u>Additional Campaigns</u>	
TLA up skill/notification	Prioritise the high risk regions based on drowning statistics and communicate these to TLA while maintaining contact and support them in implementing a pool inspection programme

Appendices which were attached to the original document – available on the WSNZ server.

1. Preschool drowning statistics 2001 – 2010
2. 2011 Pre School drowning statistics
3. 2011 Bath Mat Evaluation
4. Current U/5 strategy
5. Evaluation of the Fencing of Swimming Pools Act 1987 -Department of Building and Housing
6. Ian Hassell's Drowning Scenarios and Prevention Strategies
7. Lauren Petrass, Jenifer Blitvich and Caroline Finch, Lack of caregiver supervision: a contributing factor in Australian unintentional child drowning deaths 2000 – 2009, The medical Journal of Australia, 2011, pp228 – 231

Appendix 2.

Bathmat Campaign execution

A non-slip bath/shower mat was provided to each family at the 5 month core check with the Plunket Nurse. This mat had the message ***“Always supervise children around water....always”*** ***“Tiakina ngā tamariki ki te taha wai i ngā wā katoa”***. Plunket staff verbally reinforced the water safety messages on the mat, as they handed the mat over, removing it from the packaging and discussing the message, emphasising the need to watch children around water and keep a hand on baby at bath time.

Why provide the mat at the 5 month check?

- At 5 months babies are beginning to sit up and a bathmat is a safety precaution to reduce slipping while the baby is sitting in the bath, particularly as parents are more likely to leave the baby unsupervised as they get to this age and onwards. The research identified in relation to bath drowning deaths, children were usually left momentarily for example to finish other household tasks or answer the phone.
- 86% of all Under Five domestic and home pool drownings were children aged two or under (1999-2008), with 45% occurring at age one (12-23 months). As children approached this age, educating parents and caregivers was identified as vital in mitigating risk.

1. Sticker at 9 months check

Following up on the bathmat parents were provided with a reminder sticker at the next core check (9 months of age) for placement in their child’s Well Child Tamariki Ora book.

2. Poster

An educational poster was provided to all Plunket clinics reinforcing the message/s on the bathmat.

The project was intended to run for a three year period with evaluations at the completion of each 12 month period.

Initial bathmat campaign evaluation methodology (taken from contracts on the WSNZ server)

1. Information regarding the evaluation of this initiative is as follows:

- After the initiative has been in place for one year, Plunket will run a sample that draws 2500 parents from all those who have had a 5 month Well Child Check in the previous year.
- A letter will be sent to those 2500 parents asking if they would be happy to participate in a survey, and if so to contact WSNZ (through various means). The letter will be from both Plunket and WSNZ, however it will be sent from Plunket so all client names/contact details will not need to be transferred to WSNZ. Parents are being asked to contact WSNZ directly rather than Plunket so that no more time will be required from Plunket staff in this process. The letter will offer parents an incentive to participate. WSNZ will fund the cost of the mail out and incentive.
- WSNZ (or an organisation it contracts) will contact 500 parents in the survey. The questions that it is envisaged will be asked are set out below in italics.
- To ensure that sufficient Maori parents/caregivers are surveyed, Plunket will draw from the sample a higher proportion of parents/caregivers who identify as Maori.
- Contact details of those who have given consent to be contacted for evaluation purposes will be stored by WSNZ only, and only provided to one contracted organisation if required.

Those contact details will be destroyed confidentially once the parent/s has been surveyed.

Survey Questions

1. *Do you recall receiving a bathmat from your Plunket Nurse at the 5 month visit? Prompt if necessary – it had a rubber duck on it and a message.
If yes, progress to Q2, if no go to Q5 and Q6.*
2. *Do you use the bathmat?
If no, why not?*
3. *Can you remember the message on the bathmat? Prompt if necessary – it was about supervision.
If no, progress to Q5 and Q6.*
4. *Has this helped to make you more aware of the potential threat that all water environments pose to young children and that constant supervision is the single most important precaution that parents/caregivers can take?*
5. *How important do you think it is that young children are constantly supervised by a responsible adult when bathing? i.e. 1 absolutely critical through to 5 not that important.*
6. *Do you take, or plan to take, your young children to the pool to gain water confidence?*

Appendix 3

2011 Bathmat Research conclusions

- The Plunket/Water Safety NZ bath mat campaign appears to have been effective in raising awareness of the danger that water poses to young children and educating parents about the need for supervision when their children are around water.
- 88% said that they currently use the bath mat. Only 12% reported not using the bath mat. Reasons for not using the bath mat included that the bath mat was too dangerous (children pulling it off) and that they didn't currently need a bath mat (as their babies had grown up).
- 67% of respondents could recall the message on the bath mat. Over two thirds of respondents said the bath mat made them more aware of the potential threat water environments pose to young children.
- When asked if the message changed their attitude or behaviour, a substantial number (43%) said it had changed their behaviour. For those who thought the bath mat message had changed their attitude, examples provided included: 'parents are more careful, wary' and that children should 'never be left unsupervised.'
- Supervision of young children at bath time is seen as absolutely critical (95% of all respondents think this).
- 92% of those who recalled the bath mat message said they currently are taking or planning to take their young children to the pool to gain water confidence.
- 83% of respondents think the bathmat is effective at communicating water safety messages
- Relatively few parents could suggest other methods that would be more effective in educating parents about water safety messages. These were: the use of posters/brochures, the Plunket website as well as messages on towels and adverts on the TV/Radio.
- Finally, 88% agree the bath mat has been a really useful way to remind parents to keep a look out at all times when children are in the bath. Most people disagree that they are either too busy to keep watch at every moment and disagree that they tend not to use the bath mat as they have other preferred brands.
- It should be noted that relatively few Maori parents opted in to the survey and subsequently were interviewed by telephone – only 4% of the total survey sample. This could indicate that Maori have not been particularly engaged by the campaign. (Though it may also simply be indicative of their lack of interest in the survey process).
- Overall though, the campaign appears to be working well. The bath mat has been widely used, gets the water safety message across and appears to have been instrumental in positive attitude change. Disappointingly, only 75% of the parents we contacted said they had received a bath mat, so there may be some distribution issues for Water Safety and Plunket to address. There are indications of some regional differences in distribution of the bathmat, but, given that many regional sub samples are small, care should be taken in interpreting this data, as such differences could largely be due to the variation inherent in small samples.

Appendix 4

2013/14 Bathmat research by Ignite Research

- Overall, evaluation results continue to show positive results for the bath mat campaign – it is an effective method to raise awareness, educate and remind parents and caregivers of the danger that water poses to young children, and the need for supervision of young children at all times around any body of water.
- The proportion of parents/guardians receiving the bath mat at the 5 month Plunket check up is increasing. However, 15% are still not receiving it when they should have, so continued effort should be placed on ensuring all parent/guardians receive the bath mat.
- Although current usage of the bath mat is high (more than 4 out of every 5 people are currently using the bath mat), usage has been slowly decreasing across the years of the evaluation survey.
- Reasons for non-usage include “don’t need one now”, it’s worn out/need a new one, don’t have a bath/only have a shower, use a different bath mat – note that some reasons may still demonstrate positive behaviours e.g. using a different bath mat.
- Bath mat message recall has remained reasonably consistent – this year 70% of people who received the bath mat could recall the message on it.
- Consistently around two thirds of those who could recall the bath mat message feel that it has helped to make them more aware of the potential threat that water environments pose to young children.
- Just less than half of those able to recall the bath mat message felt it had changed their attitude or behaviour when their child(ren) are around water. Note that their attitudes/behaviours may already be positive.
- Consistently, most believe supervision around bathing is absolutely critical and they either currently take, or plan to take their child(ren) to the pool to gain water confidence.
- Positively, most parents/guardians who received the bath mat at the 5 month check up continue to believe that it is an effective method to share important water safety messages .
- Putting water safety messages on a variety of other water related items was the suggestion given by the most people as to other methods that may be more effective in getting across water safety messages to new parents.

- Most people who received the bath mat believe it has been useful as a reminder to be watchful at all times during bathing.
- Most parents/guardians who received the bath mat also defend their responsibility – nearly all disagree that they are too busy to keep watch of their child(ren) at all times when bathing them.
- A reasonably percentage of those who received the bath mat (16%) do not use it because they have other bath mats they prefer – still a positive behaviour.

Appendix 5

2015/16 Bathmat research summary of findings

- Overall, 63% of respondents received a bathmat at the five month Plunket Nurse visit (N=998). There was significant variation by region (which probably accounts for much of the significant variation by ethnicity).
- From the 628 people who had received the bathmat, 73% said they used it (N=461). There was some variation in bathmat use by ethnicity (higher in parents of NZ European and Other ethnicities), first time parent status (lower in first time parents) and area of residence.
- The most common reasons given for not using the bathmat was that it wasn't needed at this time as the child was using a baby bath, the caregiver didn't have a bath, the bathmat didn't fit or wasn't appropriate for a bath that already had grips. Other reasons included that they already had a bathmat, they didn't like it, the smell was offensive or they forgot about it.
- Around half of those who received the bathmat (N=461) remembered the message, with recall varying by ethnicity (lowest for Pacific caregivers) and area.
- Of those who used the bathmat (N=312) around two thirds reported the message made them more aware of threats that water can pose to young children. First time parents, and parents of Asian, Maori and Pacific ethnicity reported increased awareness with the message.
- Of those who said they were more aware of threats, around half said the message had changed their behaviour (N=166). When asked what behaviours had changed in response to the bathmat message, the most common response was around the theme of not leaving their child alone or unsupervised around water. Around a third mentioned being more generally alert and vigilant and the bathmat was seen by others as a reminder and a good safety measure in the bath.
- 99% of respondents thought it was very or extremely important that young children were constantly supervised by a responsible adult when bathing (N=1000).

Most respondents were planning on or taking their child/children to the pool to gain water confidence (92%). Reasons for not included already existing access to private pools or other water and an ability to instil water confidence in their own children, a dislike of public pools, inaccessible or unaffordable public pools, the child being too young at present, the caregiver being too busy or having too many children to take to the pool or this not being a priority.

Appendix: Telephone Survey Questions

Good morning/afternoon/evening, my name is [Name of interviewer] and I am calling on behalf of NZ Plunket Society. Can I speak to [Name of client]?

You and your child have recently had a visit with your Plunket nurse. The Plunket Nurse may have given you a bath mat at this time and talked about water safety. This was because Plunket is

working together with Water Safety New Zealand to provide families with water safety information to help keep your family safe around water.

We are doing a follow up telephone survey about this to see whether this water safety project was effective. This involves asking you some questions, which should only take about five minutes to answer. We would like to hear from you even if you didn't receive a bath mat. All of your responses are confidential.

Is now a convenient time or can I call back later?

10. Did you receive a bathmat from your Plunket Nurse at the 5 month visit? Yes/No

Prompt if necessary – it had a rubber duck on it and a message.

If yes, go to Q2, if no go to Q6.

2. Do you use the bathmat?

Yes/No

If no, why not? *(free text answers e.g. I already have one, don't need it now)*

If yes, go to Q3. If no, go to Q6.

10. Do you remember the message on the bathmat? (What was it?) *(It was 'Always supervise children around water' – as long as the supervise message is recalled that is sufficient).*

Yes/No

10. Has this message made you more aware of the threats that water can pose to young children?

Yes/No

If yes, go to Q5. If no, go to Q6.

10. Has this message changed your behaviour when your child/ren are around water?

Yes/No

If yes, what behaviour(s) might have changed? *(Free text e.g. supervise in bath, never leave alone with an older child)*

6. How important do you think it is that young children are constantly supervised by a responsible adult when bathing?

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

7. Do you take, or plan to take, your child(ren) to the pool to gain water confidence?

Yes/No

If no, why not? *(Free text answers e.g. No pool nearby, no transport, no money)*

Can we just ask a couple of questions about you..

8. Are you a first time parent?

Yes/No

9. Which age group do you belong to?

- Less than 20 years old
- 20-24 years
- 25-29 years
- 30-34 years
- 35 years or older

10. I am going to read out a list of ethnic groups. Can you tell me which ethnic group or groups you belong to? (Please tick those that apply)

New Zealand European Maori

Samoaan

Cook Island Maori

Tongan

Niuean

Chinese

Indian

Other (such as Dutch, Japanese, Tokelauan). Please specify_____

Appendix 6. 2017/18 Research by MM Research on behalf of Plunket.

Overall the results are very positive with several significant improvements in the results of the 2017 Campaign Evaluation Survey compared to the previous 2015 survey:

- **71%** received a bathmat at the five-month Plunket Nurse visit – up from 63% in the 2015 survey
- **78%** used the bathmat they received – a lift from 73% in the 2015 survey

Amongst those who remembered being given a Plunket bathmat, **63%** recalled a version of the safety message on the bathmat, including:

- Variations on: Always supervise children around water (56%)
- 4% recalled the specific wording in English, 3% the exact message in Te Reo Māori, and 5% remembered the message was in English and Te Reo Māori.

72% of the parents/caregivers who said they used the bathmat did recall a version of its safety message. This is a significant increase compared to 49% in the 2015 Evaluation Survey.

Amongst those who received a Plunket bathmat:

62% said the message has made them more aware of the threats water can pose to young children, especially:

- Pacific People (89%), Asian (83%), those aged less than 25 years (80%)
- While 34% said it didn't make them more aware (as they already had a high level of awareness), many agreed this was a good reminder
- 3% didn't remember the message

61% said the message increased their awareness of water hazards around the home, especially:

- Pacific People (85%), and those aged less than 25 years (80%)

53% commented on increased safety conscious behaviour as a result of being given the bathmat. This included more active supervision of children (28%), using the bathmat to prevent slipping (10%), and emptying out baths, paddling pools and other containers (8%).

- First-time parents/caregivers who received a bathmat were more likely to say they were now "more actively supervising their children" (33%), compared to those who were not first-time parents (25%)

39% agreed they have changed their behaviour when their baby is around water, especially:

- Pacific People (68%), those aged less than 25 years (66%), Asian respondents (54%)
- While 58% said they hadn't changed their behaviour, they said this is because they are always very careful with their baby in the bath and around water
- The remaining 3% didn't remember the message, even when reminded

99.5% think it is (very or extremely) important that young children are constantly supervised by a responsible adult when bathing. Four respondents said it is moderately important. This result is almost identical to 99% in the 2015 survey.

97% said their baby had never been unsupervised around water in the past month.

The three percent who said their baby had been unsupervised around water once or a few times in the past month, were asked how this happened:

- Half (52%) said they left briefly to grab a towel or face cloth, and a quarter mentioned they were left with older children (26%)

93% indicated they take, or plan to take their child to the pool to gain water confidence. This result is almost identical to 92% in the 2015 survey.