



Curtin University

2024 EVALUATION SUMMARY ADULT WATER SAFETY PROGRAM

COLLABORATION FOR EVIDENCE, RESEARCH & IMPACT IN PUBLIC HEALTH

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Collaboration for Evidence, Research and Impact in Public Health (CERIPH)
Curtin School of Population Health
Curtin University
GPO Box U1987
Perth, WA 6845
Australia
Email: ceriph@curtin.edu.au

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COLLABORATION FOR EVIDENCE, RESEARCH AND IMPACT IN PUBLIC HEALTH

The Collaboration for Evidence, Research and Impact in Public Health (CERIPH) (formerly the Western Australian Centre for Health Promotion Research) is a multi-disciplinary research group within the Curtin School of Population Health at Curtin University, operating since 1986.

Vision

CERIPH seeks solutions that promote health, prevent disease and protect populations from harm. We build individual and organisational capacity through our partnerships, applied research, education and workforce training. In recognition of the complexity of health and its determinants, our multidisciplinary collaboration provides leadership and evidence to support action across educational, organisational, socio-economic, environmental and political domains to improve population health in our region.

Function

The team has expertise in the development, implementation and evaluation of formative and longitudinal intervention research in key areas such as: early childhood health and nutrition; physical activity and nutrition; alcohol and other drug use; seniors' health; mental health; drowning prevention, HIV and sexual health. CERIPH is a unique research group in that all core staff hold front-line research and teaching positions. The group aims to foster the practice of health promotion by encompassing the nexus between research and practice.

CERIPH has built and demonstrated high-level expertise and research strength in:

- Building sustained partnerships and collaborations with vulnerable and most at risk communities and relevant community, government and private sector organisations
- Health promotion approaches using community and settings-based interventions, peer and social influence, social marketing, advocacy, community mobilisation and sector capacity building
- Promotion and dissemination of evidence-based practice and building practice-based evidence
- Provision of research training and capacity building techniques to undergraduate and postgraduate students, allied health promotion professionals and community workers.

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INTRODUCTION

Drowning risk changes throughout a person's life course and drowning among adults is an ongoing public health concern. In 2022-2023, 57% of the proportion of Australians who drowned were aged 45 years and older, with drowning above the 10-year average in all age groups except for 65-74 years where there was no change (1). In Western Australia (WA) over the summer of 2022-2023, 57% of deaths from drowning occurred in those aged 35 - 64 years (2). A range of factors influence the risk of drowning in adults including location, swimming capability, pre-existing medical conditions, medications and alcohol use.

Royal Life Saving Society WA (RLSSWA) is funded by the Western Australian Department of Health WA to coordinate an Adult Water Safety Program (AWSP) for adults over 45 years old. The program focuses on key drowning trends, risk factors, and prevention strategies and addresses swimming ability, water safety, and lifesaving skills in the target group. The primary target group for the Adult Water Safety Program is adults aged 45 years and older who reside in Western Australia.

The objectives of the Adult Water Safety Program are to:

1. Increase awareness and knowledge of general water safety and drowning prevention issues (particularly alcohol-related drowning, the impact of pre-existing medical conditions and holiday safety) in adults over 45 years of age in Western Australia;
2. Improve water safety, lifesaving and swimming skills through increased program participation amongst adults over 65 years of age in Western Australia; and
3. Increase knowledge of local water safety and drowning prevention issues amongst regional stakeholders and increase capacity to deliver this information to the community.

The Collaboration for Evidence Research and Impact in Public Health (CERIPH) was commissioned to undertake the evaluation of the Adult Water Safety Program (AWSP). The project team is composed of Associate Professor Justine Leavy, Associate Professor Gemma Crawford, Malena Della Bona and Tneale Maher. The team was responsible for contracting, ethics, providing direction and feedback on documentation, research and overall conduct of the project.

This report presents the final year of the current reporting phase and a collation of the tools used to design, deliver and evaluate the AWSP. Please find for your review:

- Recommendations for Future Practice, Research and Policy;
- Adult Water Safety Program (AWSP) Dashboard;
- Adult Water Safety Program Campaign Message Map; and
- A manuscript "Make the Right Call: Formative evaluation for a water safety program for adults in Western Australia (WA)".

The full versions of the Dashboard and Manuscript are attached to this report.

RECOMMENDATIONS FOR FUTURE PRACTICE, RESEARCH & POLICY

Collating the implications and opportunities of past AWSP publications is an important step to guide future recommendations for the AWSP program design and development. This section of the report has been created by consolidating and synthesising the implications and opportunities from publications both published (3, 4) and unpublished (5, 6). The summary provides key recommendations for consideration as the next iteration of the AWSP commences. These have been grouped under broad headings: Principles of Program Design, Segmentation, Key Populations; Messaging and Media Channels, Strategies (skills and education, peer influence and social support, community engagement and environmental, policy and advocacy) and Knowledge Translation to give greater clarity and cohesiveness to planning considerations.

The Recommendations are tabulated and presented below.

Table 1: Summary of recommendations

RECOMMENDATIONS	CLUSTER ANALYSIS	QUALITATIVE INSIGHTS	PROCESS EVALUATION	IMPACT REPORTS
PRINCIPLES OF PROGRAM DESIGN				
A comprehensive health promotion approach that incorporates action across the socioecological spectrum			X	
Focus programs to: (a) encourage aquatic participation for associated health and social benefits; (b) increase the awareness and knowledge of risks and/or prevention; (c) highlight the skills to facilitate safe participation; and (d) address barriers to participation and common misconceptions.		X		
SEGMENTATION				
Use profiles of those who drown (e.g. ‘men who boat & fish in company’, ‘affluent men with poor health’, ‘non-drinkers who boat and fish’, and ‘older men who slipped and fell’, to drive subgroup program direction.	X			
Explore resonance and impact of strategies across age, location, gender, cultural and linguistic diversity indicators as well as aquatic activity participation.		X		X
KEY POPULATIONS				
For older adults, strengthen drowning prevention and aquatic programs designed for the ageing.	X			
For older adults, investigate attitudes, barriers and enablers towards swimming programs, include willingness to participate.		X		
For retirees, investigate the individual and sociocultural factors contributing to drowning risk.	X			X
For grandparents, develop group-level strategies focused on skill building.		X	X	
For those born overseas, more water safety education including strengthening of the links between RLSSWA multicultural swimming lessons to water safety classes, such as Aqua Skills 55+ program.				X
For travellers, further explore behaviour and location as risk factors.	X	X		
For travellers, provide additional messages around travel and risk to the suite of resources, with consideration to locations travellers are likely to visit, such as visitor centres.				X
For men, develop a targeted campaign reminding men of the importance of resuscitation skills.				X

For adults living in regional and rural/remote locations, explore water safety knowledge, attitudes, beliefs and behaviours.	X	X		
MESSAGING AND MEDIA CHANNELS				
Re-profile media consumption patterns to inform appropriate media distribution channels considering the age profile of the target group.				X
Consider timing of ad placement given the most appropriate time to encourage recall is when water-based activity is front of mind.				X
Develop messages targeting social norms such as participating in water-based activities alone and at unfamiliar locations and specific risk-behaviours reported by participants such as water-based activity alone and not wearing a lifejacket whilst boating.				X
Investigate opportunities to increase social media advertising.				X
Investigate execution novelty and message usefulness in the next phase of media material development.				X
STRATEGIES-SKILLS AND EDUCATION				
Consider strategies which can continue to encourage target group swim ability and participation in water-based activity safely. Include a focus on encouraging those who can swim (albeit not well) to improve their swimming competence and confidence.				X
Incentivise requalification of CPR training.				X
Investigate opportunities to increase the Aqua Skills program in regional WA.				X
Investigate adult risk underestimation associated with aquatic activities and the overestimated ability to cope with that risk.				X
Focus on medications and medical conditions in all health promotion strategies.				X
STRATEGIES-PEER INFLUENCE AND SOCIAL SUPPORT				
Focus on the opportunity for social connection with others, across the suite of program strategies.				X
Continue to explore the role of family and peer influence among adults to understand risk practices and behaviours.				X
Further investigate the role of peer influence in adults to increase program participation.				X

STRATEGIES-COMMUNITY ENGAGEMENT + ENVIRONMENTAL

Continue to invest in community engagement events such as outdoor expos, boating and tackle shops, and public pools.				X
Investigate opportunities to increase funding for lifejackets for adults.				X

STRATEGIES-POLICY AND ADVOCACY

Continue to build and contribute to advocacy strategies focussed on the commercial determinants of health and the role alcohol marketing has on the environment in which older adults live, work, retire and play is imperative.				X
Explore opportunities to influence policy regarding alcohol advertising featuring waterways.				X
Increase cross-sector partnerships with falls prevention and other health and ageing sectors.	X			

KNOWLEDGE TRANSLATION

Formally evaluate and translate the findings on the implementation of programs such as Aqua Skills and impact on skills, confidence and drowning risk.	X			
Continue to follow an integrated knowledge translation (iKT) approach that recognises the active collaboration between researchers and research users in all parts of the research process.			X	
Continue to investigate strategies to close the know-do gap and maximise the application of research findings. For example, opportunities exist for rapid research projects (e.g. evidence reviews) and client-initiated projects (to address real world concerns) as well as joint sponsorship of higher degrees by research to build research and evaluation capacity in agencies and capacity and expertise in drowning prevention in the research setting.			X	

DASHBOARD

The AWSP Dashboard is a display of the key components of the MTRC campaign, instrument version control, program logic, comprehensive timeline of data collection, and a map of the design, refinement and delivery of the evaluation tool(s). The Dashboard captures and documents the elements that have informed the design, delivery and evaluation of MTRC from CERIPH, RLSSWA and co-produced efforts. This level of detail can support RLSSWA in designing future campaign elements. Working through the Dashboard, you find a key and/or instruction notes on tabs where appropriate (See Table 2).

The Dashboard is included as an attachment to this report.

Table 2: Summary of Dashboard tabs

TAB ONE	Instruments	<ul style="list-style-type: none"> • Description of who produced the instrument/document (e.g. CERIPH, RLSSWA or co-produced). • Type of document (e.g. formative, knowledge translation etc (colour coded)). • Description and time frame aligned by years 2019-2024 and evaluation waves (W1-W3). • Stages (S) align with the manuscript that forms part of this report to link the program design and delivery to the peer-reviewed publication in a stepwise approach.
TAB TWO	Logic Model	<ul style="list-style-type: none"> • Adult Water Safety Program Logic Model 2019-2024 informed the program elements for both organisations.
TAB THREE	Date Collection Timeline	<ul style="list-style-type: none"> • Campaign material e.g. radio, outdoor advertising and social media description, dates, length presented by each year 2019 -2024 and corresponding advertising waves (W1 – W3). • Evaluation survey details e.g. data collection method, dates, length, surveys collected (n), data analysed (n) are presented by timepoint Formative (F1), Baseline (T1), Timepoint 2 (T2) and Timepoint 3 (T3).
TAB FOUR	Survey Mapping	<ul style="list-style-type: none"> • Comprehensive mapping of each survey item, response category, notes/changes, calculation/reporting and original source. • Corresponds with the evaluation timepoints presented in Tab 3 (F1, T1, T2 and T3) • Stages (S 3 & 4) align with the manuscript that forms part of this report to link the survey items to the peer-reviewed publication in a stepwise approach

CAMPAIGN MESSAGE MAP

In 2019, as part of the initial planning of the MTRC campaign, CERIPH, in conjunction with RLSSWA, developed an *Adult Water Safety Campaign Message Map*. This strategic tool was designed to systematically map the campaign's program objectives and link them with the change objectives, related behavioural theory and specific constructs, proposed vehicle for delivery and suggested message content. The updated 2024 AWSP Campaign Message Map (Table 3) tabulates the content originally designed to be included in the AWSP campaign, and the delivery vehicles used over the past five years. The content that is **bolded has been executed and or delivered by RLSSWA**. As part of the audit, a 'Decision Summary' has been added to capture changes/decisions made to the campaign and provide context and rationale for those decisions to help guide and inform the next phases of the campaign and importantly to support corporate knowledge and history for staff who may be new to the MTRC program. The updated *AWSP Campaign Message Map* emphasises the importance of capturing intricate details for the campaign's success and future planning.

Table 3: AWSP campaign message map

The included AWSP campaign message content and delivery vehicles are **bolded**.

Additional comments summarising decisions made are provided in the **Decision Summary** column.

PROGRAM OBJECTIVES	CHANGE OBJECTIVES	RELATED THEORY & SPECIFIC CONSTRUCTS	PROPOSED VEHICLE	MESSAGE CONTENT	DECISION SUMMARY
Increase awareness and knowledge of general water safety and drowning prevention issues (particularly alcohol-related drowning, impact of pre-existing medical conditions and holiday safety) in adults over 45 years of age in Western Australia	<p>Developed using cluster analysis & interview findings</p> <p><u>Knowledge & Attitudes</u> Physical limitations, low water safety literacy & knowledge of water conditions</p> <ul style="list-style-type: none"> Perceived ability to 'save self' and ability to recognise water conditions – not always accurate. Perception of who is at risk (overseas-born only) Lack of knowledge about protective behaviours (seen in older cohort only) Fear of water keeps some from participating <p>Unrealistic fear of sharks – could use this to put water dangers (water conditions) in perspective</p> <p>Children & Grandchildren</p>	<p><i>Use differing constructs from a number of theories to target what is needed. Relevant theory overviews are provided on pg. 3</i></p> <p><u>Social Cognitive Theory</u> <i>Reciprocal determinism</i> Ensure messages are executed in multiple ways to promote behaviour change, <u>vehicles proposed</u> for the program allows for this. Ensure the <u>messages</u> cover both personal attitudes, environmental factors and behaviour change to strengthen the messages' impact. The visuals used have to be clear and people- environment-behaviour cues have to have explicit links with observational learning</p> <p><i>Behavioural capability</i> Ensure <u>messages</u> address what is needed to 'be swim/boat/fish/travel/public pool ready'. Address perceptions of who is at risk of drowning – (i.e. not only Overseas born), and where the dangers lie (i.e. sharks are not the only danger). Increase understanding of benefits of safe behaviours i.e. swim ability, wearing life jacket and ability to assess environmental conditions.</p>	<p>Potential to be rolled out nationally.</p> <p>Potential to link in with other organisations and campaigns:</p> <ul style="list-style-type: none"> Link to other campaigns (Keep Watch, DDD and AWSP) form a life-cycle loop or a Life-course approach Sun smart messaging Boat safety Fishing groups Travel industry <p>Online videos</p> <p>Print media Newspapers (print and online) including The West and community newspapers</p> <p>Pamphlets (specific for tourist destinations) covering local swimming conditions (information transfer)</p>	<p>Link messaging to Water Safety Strategy:</p> <p>1. People - age of target group (segment target group into (1) under 65 years, (2) over 65 years)</p> <p>2. Populations - Regional/remote communities</p> <p>- men</p> <p>- travellers</p> <p>3. Place - beach, ocean, coastal rivers</p> <p>- pools (focus on *contributing factors)</p> <p>4. Activities - On the water (fishing; boating & watercraft)</p> <p>- In the water (swim & snorkelling)</p> <p>Use local imagery for varying locations around regional WA and relatable 'real life' people and</p>	<p>MTRC tag line used nationally, resources differed in WA.</p> <p>Some organisation links used, specifically boating and fishing. Focus on travel not pursued after baseline data collection.</p> <p>Online videos developed, partially tested. Not included.</p> <p>Pamphlets produced with MRTC message content, not specified to individual tourist destinations.</p> <p>Local imagery included in majority of branding and digital/online media, complimented by illustrations/graphics. Radio adverts delivered: 1 in</p>

PROGRAM OBJECTIVES	CHANGE OBJECTIVES	RELATED THEORY & SPECIFIC CONSTRUCTS	PROPOSED VEHICLE	MESSAGE CONTENT	DECISION SUMMARY
	<ul style="list-style-type: none"> Parents/Grandparents often focussed on young children & behaviour of teenagers – reminder that water can be dangerous for adults too. Children and grandchildren often encouraged/ facilitate aquatic participation. <p><u>Skill development</u> Skills development in order to stay safe – e.g. role of swim ability to save self in boating accident.</p> <p><u>Behavioural Intent</u> Counter and prepare for contributing factors:</p> <ul style="list-style-type: none"> Alcohol medical conditions Physical limitations and swim ability <p>Environmental awareness</p>	<p><i>Self-efficacy</i> Ensure <u>messages</u> are specific about ‘what people should do to make behaviours around water safer’. Describe, show and role model enablers and ways in which potential barriers can be overcome.</p> <p><i>Expectations</i> Ensure <u>messages</u> show positive outcomes of behaviour change. Concentrate on a ‘gain’ focus by making messages positive.</p> <p><i>Observational learning</i> Use <u>role models</u> to showcase the skills you want the target group to adopt, promote, uptake focus on stories of others, whether they are ambassadors or champions. Show how they changed their behaviour or what they do to stay safe when getting ‘swim/ boating/ fish/ pool ready and positive impacts of this.</p> <p>Reinforcements Develop a self-initiated ‘reinforcement’ by way of reward or incentive in the <u>messaging</u>.</p> <p><u>Health Belief Model</u> Relevant HBM constructs are: <i>Perceived susceptibility</i> Formative research tells us the target group perceive the severity of drowning as high. Therefore, <u>perceived susceptibility</u> has the potential to strongly predict the risk assessment of drowning. Use</p>	<p>Radio - used at least multiple times a week by 80% of the target group [61% daily or more, 20% multiple times a week]</p> <p>Digital and online (website, newsletters, EDM and Facebook)</p> <p>Face to face education – information sessions (local sporting clubs, community groups, seniors’ associations) and Grey Medallion</p> <p>Local champions/Ambassadors</p>	<p>situations to promote messages</p> <p>*Contributing factors to address:</p> <ul style="list-style-type: none"> Alcohol medical conditions Physical limitations and swim ability Environmental awareness <p>Plan to use “Swim Ready” resources within the campaign. Consider using Swim ready, Travel ready, Boat ready, Fish ready (or something similar) so the ‘swim ready’ resources don’t feel tacked on.</p> <p>Play on words - Get Set Go</p>	<p>W1, 2 in W2 and 4 in W3. (see data collection timeline for more detail)</p> <p>These contributing factors formed basis of MTRC safety messaging.</p> <p>EDMs sent out monthly</p> <p>Grey medallion program - consultation resulted in name change to Aqua Skills 55+.</p> <p>‘Swim Ready’ resources/strategy not included following consultation with TG (focus groups) and RLSSA.</p> <p>‘Ready’ & ‘Get Set Go’ resources/strategy not included following consultation with TG (focus groups) and RLSSA</p>

PROGRAM OBJECTIVES	CHANGE OBJECTIVES	RELATED THEORY & SPECIFIC CONSTRUCTS	PROPOSED VEHICLE	MESSAGE CONTENT	DECISION SUMMARY
		<p>perceived severity to encourage the target group to re-assess their perception of their susceptibility to drown. <u>Messages</u> should therefore challenge the target group's propensity to overestimate skill and underestimate risk.</p> <p><i>Perceived benefits</i> Explain benefits of water safety. This fits in with the gain <u>messaging</u>.</p> <p><i>Perceived barriers</i> Use <u>messages</u> to correct misinformation about sharks and skill level as barriers to enjoying aquatic locations and building confidence in and around water. Challenge perceptions of body image as a deterrent for getting involved (especially older adults).</p> <p><i>Cues to Action</i> Provide a 'how to' <u>message</u> and use reminders at relevant locations (<u>proposed vehicle</u>).</p> <p><i>Self-Efficacy</i> Demonstrate desired behaviour through role modelling. Provide detail about 'how to' perform important tasks in various situations (locations, conditions)</p> <p><u>Message framing</u> We know from interviews with the target group, when it comes to drowning risk and water safety in older adults, some people are not aware of the risk to themselves and</p>			

PROGRAM OBJECTIVES	CHANGE OBJECTIVES	RELATED THEORY & SPECIFIC CONSTRUCTS	PROPOSED VEHICLE	MESSAGE CONTENT	DECISION SUMMARY
Improve water safety, lifesaving and swimming skills through increased program participation amongst adults over 65 years of age in Western Australia	Benefits of aquatic participation <u>Skill development</u> – perceived vs actual ability and improved swimming/lifesaving skills	<p>others are acutely aware, to the point of avoidance.</p> <p>In line with health promotion best practice and the RLSSWA brand</p> <p><u>all messages should have a gain-framed focus</u></p>		<p>Promoting the benefits of swimming and aquatic activities.</p> <p>Challenge barriers to participation and social norms e.g. get involved, never too late to learn something new</p>	<p>Covered in presentations and/or Aqua skills.</p> <p>Covered in presentations and/or Aqua skills</p>

A manuscript is currently under peer review with Global Health Promotion (GHP) the official publication of the International Union for Health Promotion and Education (IUHPE). The journal publishes authoritative peer-reviewed articles for a worldwide audience of researchers and professionals interested in health promotion and health education. The GHP journal has an impact factor of 2.0 and is published four times per year. RLSSWA's current staff and previous staff who worked on the design, delivery and evaluation of MTRC are co-authors of the publication. This highlights the sustained partnership between RLSSWA and CERIPH and the commitment to integrated knowledge translation over the five years of the current evaluation cycle.

The submitted manuscript '*Make the Right Call: Formative evaluation for a water safety program for adults in Western Australia (WA)*' is included as an attachment to this report.

Figure 1: Manuscript abstract

Background: Preventing drowning in adults is a complex, multifaceted injury prevention issue. The adult drowning rate in countries like Australia has continued to rise. In 2023, more than half of those who drowned in Australia were aged over 45 years. While there has been a call for robust, evidence-informed drowning prevention interventions across the life course; evidence of evaluated, drowning prevention programs for adults is still lacking. For more than a decade, drowning prevention researchers and practitioners in Western Australia (WA) have worked in partnership to design and evaluate evidence-informed programs. This paper describes formative research to develop 'Make the Right Call' (MTRC), an adult water safety program in WA.

Methods: A staged, mixed methods, formative evaluation was undertaken to inform the design of MTRC. Stages: The approach involved cluster analysis of coronial data 2008-2018 (n=93), in-depth interviews (n=15) with adults aged 65 years and older, theory mapping, survey design, content and face validity testing of a baseline questionnaire with content experts (n= 11) and a refined instrument to collect knowledge, norms and water-based activity. The subsequent MTRC program comprises a media campaign, community swimming and safety classes, lifejacket trade-in, subsidised first-aid training, and community education.

Discussion: The results of each stage informed the design and evaluation of a new evidence-informed and theory-driven drowning prevention program for adults 45 years and older delivered by the peak drowning prevention agency in WA. An investment in mixed-methods research by the partnership added rigour and credibility to the program and evaluation design.

Conclusion: To our knowledge, this is the first adult water safety program to apply a theory-driven and evidence-informed approach to development, implementation and evaluation. The partnership was vital in maximising and accelerating the acceptable transfer of results to enhance knowledge creation and, ultimately, the design of the MTRC drowning prevention program.

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