AUSTRALIAN WATER SAFETY STRATEGY **2030**

Towards a nation free from drowning

Australian Water Safety Council

The Australian Water Safety Council (AWSC) is deeply committed to drowning prevention in Australia and is a collective voice for Australia's leading water safety organisations.

The Council acts as a consultative forum comprising leading water safety organisations and focuses on the presentation of key water safety issues to governments, industry and the community.

The Australian Water Safety Council is committed to improving water safety in Australia as demonstrated through the production and implementation of five National Water Safety Plans/Strategies. These documents have generated bipartisan support for water safety in Australia and resulted in improved water safety throughout the country.

The Australian Water Safety Council member bodies continue to demonstrate their commitment to water safety by directing resources of their respective organisations towards the development and implementation of the Australian Water Safety Strategy.

Members

Royal Life Saving Society – Australia (RLSSA)
Surf Life Saving Australia (SLSA)
Australasian Council for the Teaching of Swimming and Water Safety (AUSTSWIM)
Australian Leisure Facilities Association (ALFA)
Australian National Sports Fishing Association (ANSFA)
Australia New Zealand Safe Boating Education Group (ANZSBEG)
Australian Swimming Coaches & Teachers Association (ASCTA)
Australasian Diving Safety Foundation (ADSF)
Farmsafe Australia
Surfing Australia
Swimming Australia
The Child Accident Prevention Foundation of Australia (Kidsafe)
Government Observers: Department of Health and Bureau of Meteorology

Contact

Justin Scarr
Convenor, Australian Water Safety Council
C/- Royal Life Saving Society – Australia
PO Box 558, Broadway NSW 2007
Phone: (02) 8217 3111 Fax: (02) 8217 3199
watersafety.com.au

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The Australian Water Safety Strategy 2030 working group consists of: Justin Scarr, Alison Mahony, Stacey Pidgeon, Shane Daw and Jaz Lawes.

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FOREWORD BY CONVENOR

On behalf of the Australian Water Safety Council (AWSC) I am pleased to present the Australian Water Safety Strategy 2030 (AWSS 2030).

The Australian Water Safety Strategy (AWSS) plays an essential role in National, State and Territory, and community approaches to preventing drowning and promoting safe use of the nation's waterways and swimming pools.

This AWSS 2030 marks a new and renewed approach. It is more structured, targeted and reinforces four things that are key to our aspirations of reducing drowning by 50% by 2030.

First, Australia has some of the lowest drowning rates in the world, but still every drowning is tragic and preventable.

While we aimed to develop a Strategy that focused on key issues, stakeholder consultation and research demanded that we pursue all drowning issues. In this respect, the AWSS 2030 sets an agenda for all.

Second, all drowning is local. The AWSS 2030 sets out a drowning prevention framework, aims to guide policy, influence the priorities of Government(s) and organisations, and to focus the research agenda. In truth, nothing matters more than the actions in communities.

Third, we love the water, but we must understand its dangers and our own limitations. The AWSS 2030 presents a careful balance of focusing on drowning, while reinforcing the benefits of recreating in and around the water.

Finally, no single organisation, Government or advocate can do it alone. Collective action, alignment with other sectors and inspiring others to make a difference are all key to our success.

In 2030, looking back and reflecting on this Strategy, we will know that we have been successful if:

- We have remained united in action
- We have been resourceful enough to meet unexpected challenges
- We have substantially reduced drowning in more than a few key areas of focus, and if
- Australians continue to love the water and do so safely.

The Australian Government's support for the AWSS is extremely important, as is that of State and Territory Governments. This support reinforces our strong collaboration and commitment to working together to reduce drowning and promote the safe use of our waterways.

In closing, I wish to acknowledge the AWSS 2030 working group: Alison Mahony, Stacey Pidgeon, Shane Daw and Jaz Lawes, and Royal Life Saving Society – Australia and Surf Life Saving Australia for coordinating this process and publication. Thank you also to all who contributed expertise and energy to the AWSS 2030.

Justin Scarr
Convenor
Australian Water Safety Council

Background

The Australian Water Safety Council (AWSC) released its first National Water Safety Plan in 1998. This evolved into the Australian Water Safety Strategy (AWSS) in 2008, which established an aspirational target of reducing drowning by 50% by 2020 and launched a structure that reinforced a focus on a life stages approach, identified high-risk locations and key drowning challenges.

AWSS 2008 brought new energy to areas including strategies to reduce drowning in multicultural communities, at unpatrolled beach locations, while boating and in inland waterways. Perhaps the most significant achievement was the continued reduction of drowning in children 0-4 years, and 5–9 years, both exceeding the targeted 50% reduction by 2020. It also expanded recognition of the impacts of non-fatal drowning.

Consultation

The new AWSS 2030 is the product of ongoing collaboration and extensive consultation that started with reflection on the successes and challenges of the AWSS 2008 – 2020 period. The AWSC then convened a workshop of over forty researchers, policy makers and practitioners, including representatives of the World Health Organization, as well as colleagues from the United Kingdom, New Zealand and Thailand.

This workshop resulted in two separate consultation drafts, and more than seventy separate feedback submissions. This was the most robust and detailed drafting and consultation yet.

Framework

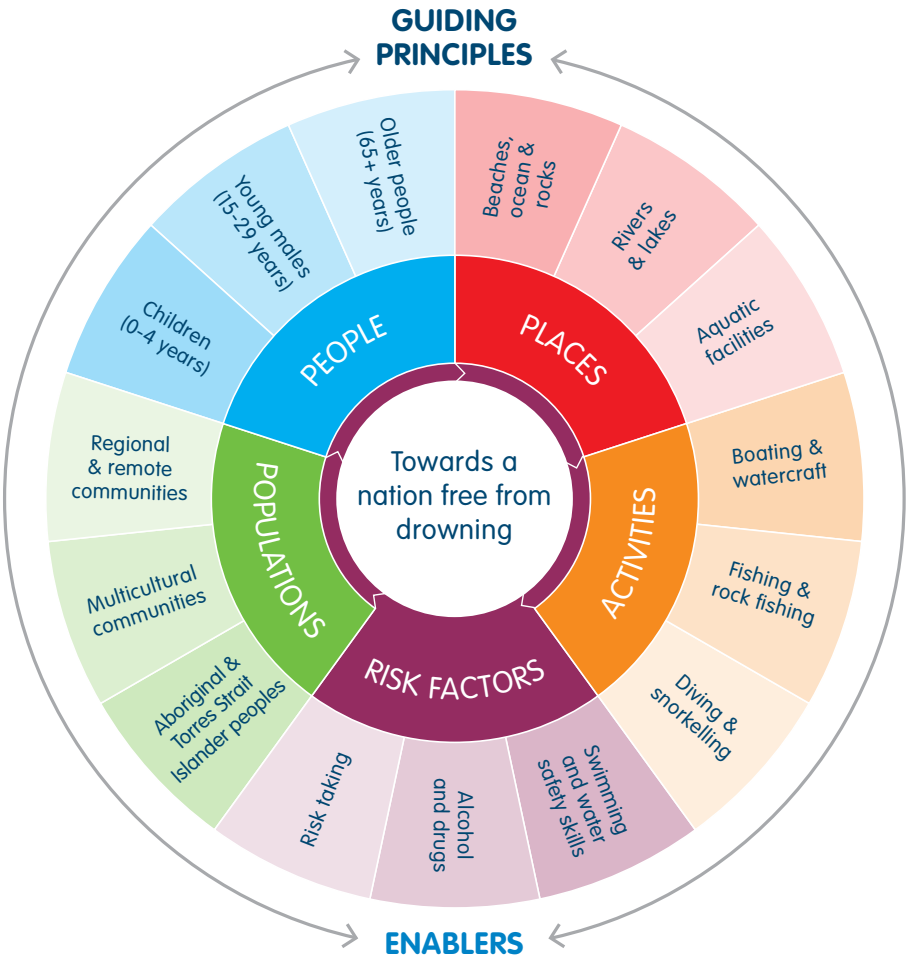
The AWSS 2030 presents a framework that:

- Identifies the key drowning prevention priorities, areas of focus and approaches
- Establishes a roadmap for action that may be monitored, supported and celebrated
- Inspires stakeholders; Governments, organisations and communities to act

This framework is structured into five Priority Areas:

- People
- Places
- Activities
- Populations
- Risk Factors

The AWSS 2030 identifies three areas of focus in each Priority Area based on research and consultation, fifteen in total.



AWSS 2030 Targets

The AWSS 2030 commits to an aspirational goal of reducing drowning by 50% by 2030. This is expressed in the targets replicated throughout most of the areas of focus. The AWSC stresses that progress must be measured on a population rate basis, and where appropriate, reflect incremental changes in visitation at places, or participation in activities, and in population demographics. A baseline, based on the three financial years 2017/18, 2018/19 and 2019/20 will be established.

It is stressed that these targets are aspirational, and accountability difficult to assign. In any case, we urge all to join this approach.

Key Themes

The AWSS 2030 identifies many key activities, across seven enablers: research, policy, advocacy, collaboration, education, safe environments, and workforce.

Among these activities key themes emerge:

- Drowning and other injuries
  The AWSS 2030 encourages a continued focus on the full impacts of drowning, including non-fatal drowning and water-related injury and death
- Community based action
  The AWSS 2030 encourages local water safety plans, whether they are land and water management plans, Local Government plans, or regional water safety plans
- Swimming and water safety skills across the community
  The AWSS 2030 promotes the need for equity in the renewal of swimming, water safety and lifesaving skills across the community
- Frontline services
  The AWSS 2030 encourages support for volunteer lifesavers, lifeguards on beaches and in aquatic centres, and swimming and water safety instructors
- Infrastructure
  The AWSS 2030 encourages investments in aquatic centres, surf lifesaving clubs, and innovative developments that increase safe recreational access to waterways

Partnership

Widespread adoption, adaptation, and implementation of the AWSS 2030 by many including State, Territory, and Local Governments, organisations and communities is critical to its success. The AWSS 2030 calls for meaningful partnerships at all levels, and especially with those sectors who may not yet play a direct role in drowning prevention but have the potential to share resources, reach new audiences and help us create change.

Monitoring Progress, Measuring Success

The Implementation of the AWSS 2030 relies on the resources and support of many. Monitoring, evaluation and review are essential components and must be resourced appropriately.

Progress will be monitored across

- Partnership – Are Government(s), organisations, communities supporting the AWSS 2030?
- Progress – Are key activities being implemented and having the intended impact?
- Change – Is there evidence that the medium-term changes are being achieved?
- Targets – Are we on track to achieve the 2030 targets?

The AWSS 2030 will implement a Deliver, Track and Plan model, with the expectation that data and insights collected will be used to adjust actions and contribute to a mid-term adjustment to the strategy in the form of AWSS 2030 2.0 (2025 – 2030).

COVID-19 Impacts

The COVID-19 pandemic has created considerable uncertainty for the water safety sector. At this stage it is impossible to accurately predict the long-term impacts, but some areas of concern are already apparent.

Macro level changes in population growth, domestic and international tourist patterns, leisure patterns, as well as economic measures including investments in infrastructure are likely to have an impact on drowning in coming years. Some in the sector have warned of interruptions to skill development pathways for children in swimming, water safety and lifesaving, and extreme pressures on lifesaving services will continue to challenge the water safety sector. The AWSC will monitor and adjust as these long-term impacts become more identifiable.

KEY DROWNING FACTS

The Australian Water Safety Strategy 2030 has benefited substantially from the strengthening of research and data capabilities of water safety organisations. Evidence-informed decision making is critical to successfully identifying issues, planning prevention strategies and introducing outcome measures. These are some of the issues that are top of mind in presenting this Strategy.

For every **fatal drowning**, there are three non-fatal drowning incidents

One-year-old toddlers record the highest drowning rate of any age (3.47/100,000 population)

Aboriginal and Torres Strait Islander people represent 3% of the Australian population but account for 5% of drowning deaths

19% of drowning deaths among people aged 15 years and over recorded a **Blood Alcohol Concentration** (BAC) ≥0.05%

Rivers account for 27% of drowning deaths

Beaches account for **19%** of drowning deaths

A **pre-existing medical condition** was present in 36% of drowning deaths

23% of drowning deaths occur while **swimming and recreating**

Males drown at a rate 4 times that of females

61% of drowning deaths occur **outside of major cities**

Fatal drowning rate has reduced by 26% over the last ten years

Child (0-4 years) fatal drowning rate has reduced by 50% over the last ten years

All fatal drowning facts relate to the time period 2009/10 to 2018/19
All non-fatal drowning facts relate to the time period 2002/03 to 2014/15


NORTH WAGGA

EXTERNAL FACTORS IMPACTING DROWNING PREVENTION

Equally essential to planning are social, economic, environmental and technological factors that impact on peoples exposure to water, whether intended or otherwise. Key questions included: how will changes in the Australian population (growth, diversity, age distribution), weather and technology change the way we interact with water? Important sources of data include the Australian Bureau of Statistics and Bureau of Meteorology.

SOCIAL AND ECONOMIC

Growing population

Australia's population is expected to reach 30 million between 2029 and 2033 (1)

Diversifying population

30% of Australians were born overseas, with all countries represented in Australia's current population (2)

Ageing population

In the past 20 years, the proportion of Australians aged 65 years and over increased from 12% to 16%. Projections indicate this cohort will increase more rapidly over the coming decade (3)

International visitors

9.5 million international visitors to Australia in 2019 (5)

Increased urbanisation

By 2027, approximately 70% of Australians are expected to live in capital cities (1)

Coastal dwelling

More than 90% of Australians live within 100km of the coast (4)

Expected impact of COVID-19

Increase in domestic tourism, visitation at waterways, pressure on Government and household budgets, and increased industry costs related to infection control procedures

ENVIRONMENTAL

2019 was Australia's **warmest year** on record (6)

Higher annual national mean temperatures could see an increase in swimming and water-based activities as people seek to cool down

Australia will experience further **increases in sea and air temperatures**, with more hot days and marine heatwaves, and fewer cool extremes (7)

This is likely to drive a continued increase in activity on Australia's waterways

While some areas will experience **drought**, there will also be an increase in intense **heavy rainfall** throughout Australia which could lead to a higher number of floods (7)

In addition, rising sea levels and more frequent and intense storms and weather systems increases the risk of coastal inundation and erosion, and the impacts of large waves on coastal regions

TECHNOLOGICAL

New media, including **social media**, is changing the way people find and use aquatic environments

New technology to assist in **identifying** and **responding to emergencies**

Increased role for **drone technology** and **Artificial Intelligence**

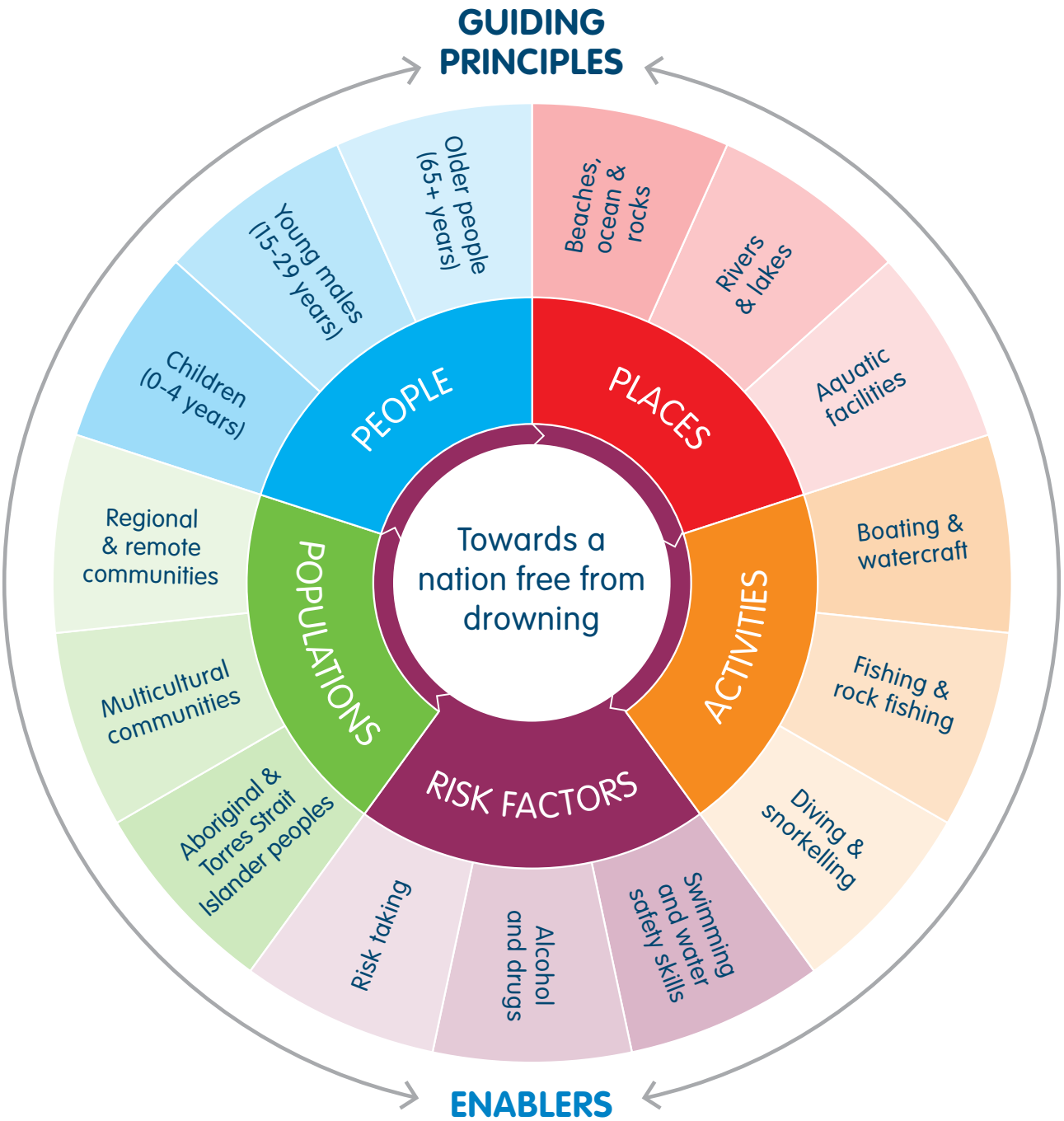
Technological advances in **training** and **assessment methods**

Use of big data to drive efficiency and further **community impact**

New **equipment** creating new aquatic behaviours

Inclusion | **Safe participation** | **Targeted advocacy**

Empowering communities | **Taking action**



Research | **Policy** | **Advocacy** | **Collaboration**

Education | **Safe environments** | **Workforce**

VISION

Towards a nation free from drowning.

GOAL

To reduce drowning and build water safe communities.

GUIDING PRINCIPLES

All efforts to reduce drowning and promote water safety should be guided by the following principles:

- Inclusion
  Create opportunities for all, including people of all ages, abilities and backgrounds, by ensuring equitable access.
- Safe participation
  Encourage participation, focusing on safe skills and behaviours.
- Targeted advocacy
  Highlight key issues, build solutions and create change.
- Empowering communities
  Foster local approaches and co-design strategies by building capacity and providing support.
- Taking action
  Ensure policies and programs are informed by best available evidence.

PRIORITY AREAS

The Australian Water Safety Strategy has five Priority Areas; People, Populations, Places, Activities and Risk Factors.

In each Priority Area, the strategy focuses on three issues based on:

- Where the burden is proportionally highest;
- Where the issue is emerging and/or drowning is most preventable;
- Whether the issue is sufficiently defined, so that actions can be targeted.

PRIORITY AREAS AND FOCUS AREAS

People

Focusing on the issue of drowning in:

- Children (0-4 years)
- Young males (15-29 years)
- Older people (65+ years)

Places

Focusing on the issue of drowning at:

- Beaches, ocean and rocks
- Rivers and lakes
- Aquatic facilities

Activities

Focusing on the issue of drowning during:

- Boating and watercraft
- Fishing and rock fishing
- Diving and snorkelling

Risk factors

Focusing on the issue of drowning related to:

- Swimming and water safety skills
- Alcohol and drugs
- Risk taking

Populations

Focusing on the issue of drowning in:

- Aboriginal and Torres Strait Islander peoples
- Multicultural communities
- Regional and remote communities

ENABLERS	DESCRIPTION
Research	Research should be relevant in terms of policy and practice; in turn, policy and practice must be evidence-informed. This is facilitated by building capacity across the research sector and establishing strong partnerships between researchers, policymakers and practitioners.
Policy	Evidence-informed policy can generate positive change. Attention needs to be given to all levels of Government in developing, implementing and evaluating public policy.
Advocacy	Increasing awareness is fundamental to reducing drowning. Advocacy efforts should be directed towards Government and policymakers, as well as the general public.
Collaboration	Collaboration with purpose will enable alignment and coordination both within and outside of the water safety sector. Advocacy efforts can be strengthened by a united voice and consistent safety messages.
Education	Community education and capacity building are vital to create water safe communities. Given the opportunity, people of all ages and backgrounds can learn swimming and lifesaving skills.
Safe environments	Creating safer aquatic environments will benefit all Australians. Alongside reducing drowning, there is a need to promote skill development and a lifelong love of the water.
Workforce	The water safety sector depends on a diverse, skilled and proactive workforce. This includes volunteer surf lifesavers, lifeguards, swimming teachers and health workers. Central to this are opportunities for professional development and meaningful engagement.

PRIORITY AREA

People

Why is this a Priority Area?

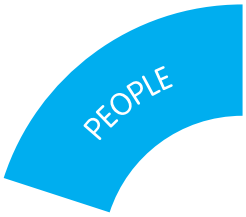
Drowning risk changes throughout a person's lifespan. As young children become more mobile, the risk of drowning increases. As teenagers reach adulthood, legal drinking age and gain greater independence, their risk of drowning also increases. Males are known to be at higher risk of drowning than females, particularly during adolescence and early adulthood as risk-taking behaviour becomes more apparent.

Pre-existing medical conditions and medications also pose a drowning risk. This is especially relevant to older people as the proportion of people with medical conditions increases with age.

What can be achieved by taking this approach?

Drowning prevention strategies need to be tailored to specific life stages, taking changes in mobility, independence and general health into consideration. By highlighting life stages with increased drowning risk, prevention efforts can be focused according to need. In part, this is about reducing drowning during high-risk periods but equally important is skill development in preparing for approaching life changes.

PRIORITY AREA: PEOPLE



FOCUS:

Children (0-4 years)

Why is this an area of focus?

Although significant progress has been made in reducing drowning in children aged 0-4 years, deaths among children remain high relative to other age groups, particularly in the second year of life as children become more mobile. Research shows that there are eight non-fatal drowning incidents for every death among children aged 0-4 years, the highest fatal to non-fatal drowning ratio of any age group (8).

Toddlers are curious and increasingly mobile but lack an understanding of water-related hazards, making them vulnerable to drowning in and around the home, particularly in private swimming pools and dams on rural properties. Parental and carer supervision is considered critical to preventing drowning, so educating each new generation is a high priority. Barriers to water, usually in the form of swimming pool fencing, are a well-accepted and effective approach.

Preventing drowning in children aged 0-4 years is a priority because young children continue to experience high rates of drowning, despite there being clear and effective prevention measures.

Key data (2009/10 to 2018/19)

248 drowning deaths	**Average of 25** deaths per year	**1.62 deaths/** 100,000 population

Top 3 locations
53% Swimming pool
19% Bathtub/spa bath
10% Lake/dam

Top 2 activities
78% Fall
19% Bathing

The drowning rate triples after a child's first birthday, with the rate peaking at one year of age (3.47 deaths/100,000 population)

Fatal to non-fatal ratio
1:8*

42% of all non-fatal drowning incidents occur in children aged 0-4 years*

Risk factors

- Lapses in parental or carer supervision caused by everyday distractions
- Leaving children to be supervised by older children, rather than an adult
- Lack of appropriate barriers to prevent access to water
- Faulty barriers which are not compliant with applicable safety standards
- Pool gates being deliberately propped open
- Water containers left unattended and unemptied

Example actions

- Media campaigns targeting parents and carers to raise awareness and promote prevention strategies
- State and Territory swimming pool fencing legislation
- Compliance laws, inspection regimens and swimming pool registers
- Proactive implementation of pool inspection systems by Government authorities
- Reinforcing the importance of active, adult supervision and avoiding distractions
- Swimming and water safety lessons for preschool aged children
- First aid and CPR training courses for parents and carers

*Data relates to 2002/03 to 2014/15

Key activities 2021-2025

Research

- Investigate fatal and non-fatal drowning to identify trends and emerging issues
- Investigate the long-term health, social and economic impacts of non-fatal drowning
- Evaluate child drowning prevention campaigns and programs

Policy

- Review State and Territory pool fencing legislation and enforcement systems
- Strengthen non-fatal data collection, including the investigation of additional data sources
- Work with local governments and the swimming pool industry to provide practical assistance with interpreting Australian Standards and State and Territory legislation, and translating this into community action

Advocacy

- Coordinate child drowning campaigns targeting the importance of active supervision at all times around water and barriers to prevent children accessing water unaccompanied
- Deliver coordinated child drowning prevention campaigns which highlight the full burden of drowning
- Advocate strengthened policies regarding pool barrier requirements
- Raise awareness of water-related hazards on rural properties and agricultural land, with a focus on promoting safe play areas for children

Collaboration

- Standardise safety messages across all child drowning prevention programs
- Establish ways to share effective campaign materials and expertise to strengthen the efficiency and effectiveness of campaign development and implementation

Education

- Expand availability of child drowning content in parental education programs
- Improve access to first aid and CPR training courses for parents and carers
- Ensure new homeowners and renters have access to relevant pool safety information

Safe environments

- Review and update pool safety signage to ensure optimal effectiveness and functionality
- Strengthen strategies to address child drowning around the home, including bathtubs, ponds and other water containers
- Emphasise the need to supervise children at all times around water in relevant public safety signage

Workforce

- Strengthen professional development opportunities for aquatic industry staff and private pool barrier inspectors

Creating medium term changes in

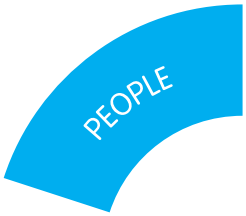
Knowledge	Policy	Practice	Awareness	Behaviour
Understanding the full burden of drowning and intervention effectiveness	Pool fencing laws in all States and Territories	Implementation of pool fencing compliance programs at the relevant Government authority level	Identification of child drowning hazards and prevention measures	Active supervision among parents and carers

Targets 2030

All relevant Government authorities have pool fencing compliance programs

Drowning rate among children reduced by 50%

PRIORITY AREA: PEOPLE



FOCUS:

Young males (15-29 years)

Why is this an area of focus?

Males continue to be over-represented in drowning statistics. This trend is especially apparent during adolescence and early adulthood, a time of increasing independence. Drowning is often attributed to higher exposure due to increased participation rates, inflated confidence levels that may not reflect abilities, the influence of peer pressure and an increased likelihood to engage in risk-taking behaviours.

Preventing drowning in young males (15-29 years) is a priority based on the rationale that early adoption of safe behaviours may have flow-on benefits through adulthood. Secondary schools, universities and sport and recreation clubs may represent a good entry point for skill and awareness development.

Key data (2009/10 to 2018/19)

498
drowning deaths

Average of 50
deaths per year

1.99 deaths/
100,000 population

Top 3 locations
35% River/creek
22% Beach
12% Rocks

Top 3 activities
39% Swimming and recreating
10% Boating
9% Jumped in

20% BAC ≥0.05%

18% Illegal drugs

The drowning rate for 19-year-old-males is **9 times higher** than 12-year-old males

There are **7 times** as many male drowning deaths as female in this age group

Risk factors

- Peer pressure and risk-taking behaviour
- Alcohol and drug consumption
- Overconfidence that does not reflect actual ability
- Inexperience in recognising hazards and safe participation in aquatic activities
- Gaps in swimming ability and water safety knowledge

Example actions

- Targeted safety campaigns to promote safe behaviour around water
- Interactive online resources and use of social media tools
- Random testing for Blood Alcohol Concentration (BAC) and drug consumption on waterways
- Enforced legislation regarding drink driving of vessels
- Safety advice, signage and active enforcement
- Swimming and lifesaving skill development

Key activities 2021-2025

Research	• Expand research to include non-drowning-related injuries among young males • Investigate risk factors for risk-taking behaviour among young males • Investigate the effectiveness of peer-to-peer education strategies • Evaluate the effectiveness of existing water safety campaigns, programs and services
Policy	• Strengthen policies supporting the delivery of lifesaving education in secondary schools • Investigate policy change as a means of reducing alcohol-related drowning risk around hospitality venues
Advocacy	• Deliver campaigns targeting alcohol consumption and risk taking in drowning among young males • Use technology to increase access to key water safety messages
Collaboration	• Partner with education, injury prevention and health organisations to build capacity and coordination • Develop and confirm consistent messaging across the water safety sector • Partner with community and recreation groups
Education	• Deliver peer-led education with a focus on prevention, alcohol and risk taking, how to avoid harmful situations and the consequences of negative behaviour • Expand lifesaving education and training (e.g. Bronze Medallion) • Expand education strategies to include targeted digital and social media content
Safe environments	• Develop and implement interventions at drowning blackspots for young males
Workforce	• Support teachers to deliver lifesaving education in secondary schools through appropriate training materials and opportunities

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Understanding risk factors, intervention effectiveness and appropriate delivery strategies	Swimming and lifesaving education in secondary schools	Programs and services, designed, developed and delivered by young males	Program messages, drowning risk factors and preventive measures	Risk-taking behaviour (particularly undertaken after alcohol or drug consumption)

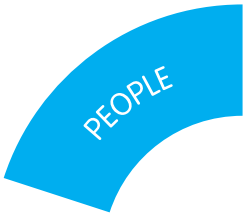
Targets 2030

Increased swimming and lifesaving education in secondary schools

Reduced risk-taking behaviour

Drowning rate among young males reduced by 50%

PRIORITY AREA: PEOPLE



FOCUS:

Older people (65+ years)

Why is this an area of focus?

Australia has an ageing population, with older people living longer and having healthier lives than those of previous generations. The low impact nature of aquatic activity makes it an ideal form of physical activity and recreation for older people. However, reduced physical ability and pre-existing medical conditions contribute to the drowning risk in this demographic. Reducing drowning among older people is a complex issue and limited progress has been made.

Preventing drowning in older people (65+ years) is a priority because Australians are remaining more active into their later years and are well placed to realise the benefits of fun, fitness and recreation in and around the water but need appropriate water safety education to stay safe.

Key data (2009/10 to 2018/19)

609
drowning deaths

Average of 61
deaths per year

1.74 deaths/
100,000 population

Top 3 locations
27% River/creek
18% Beach
16% Ocean/harbour

Top 3 activities
21% Swimming and recreating
20% Fall
16% Boating

66% Pre-existing medical condition

Most common pre-existing medical condition was **cardiovascular disease**

36% Medications (prescription or over the counter)

Risk factors

- Reduced physical ability and increased mobility limitations
- Reduced fitness, and swimming and water safety skills
- Pre-existing medical conditions and medications
- Swimming or recreating alone
- Overestimation of skill and underestimation of risk
- Alcohol consumption

Example actions

- Targeted campaigns focused on the role of pre-existing medical conditions and medications
- Promotion of the benefits of aquatics for older people as part of an active, healthy lifestyle
- Industry programs encouraging older people to test and redevelop their skills in controlled environments
- Swimming and water safety education for older people

Key activities 2021-2025

Research	• Examine motivators and barriers for aquatic participation • Investigate risk factors for falls into water • Investigate the role of specific pre-existing medical conditions and medications in drowning
Policy	• Integrate drowning prevention with healthy ageing and falls prevention policies and plans
Advocacy	• Promote aquatic recreation in supervised locations for people with limited mobility and pre-existing injuries • Raise awareness of drowning prevention measures for older people • Deliver campaigns promoting medical check-ups that identify and address risk factors
Collaboration	• Partner with organisations and agencies representing older people to promote water safety awareness • Partner, and align messaging, with healthy ageing and falls prevention sectors • Develop pathways to re-engaging with aquatic activities
Education	• Deliver targeted water safety and lifesaving programs to encourage safe aquatic recreation
Safe environments	• Promote aquatic facilities as safe venues for physical activity and rehabilitation in a controlled environment • Promote aquatic facility design and redevelopments that cater for an ageing population • Promote access to, and the safe use of, open water locations to older people as they age, including beaches and lakes
Workforce	• Strengthen aquatic and recreation sector workforce capacity to cater for an ageing population

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Understanding drowning risk factors and program effectiveness	Guidance in falls prevention and other healthy ageing policies	Infrastructure and programs specific to the needs of older people	Risk factors for drowning among those with pre-existing medical conditions	Regular medical check-ups to assess physical ability and monitor medical conditions

Targets 2030

Increased safe participation in aquatic activities by older people

Drowning rate among older people reduced by 50%

PRIORITY AREA

Places

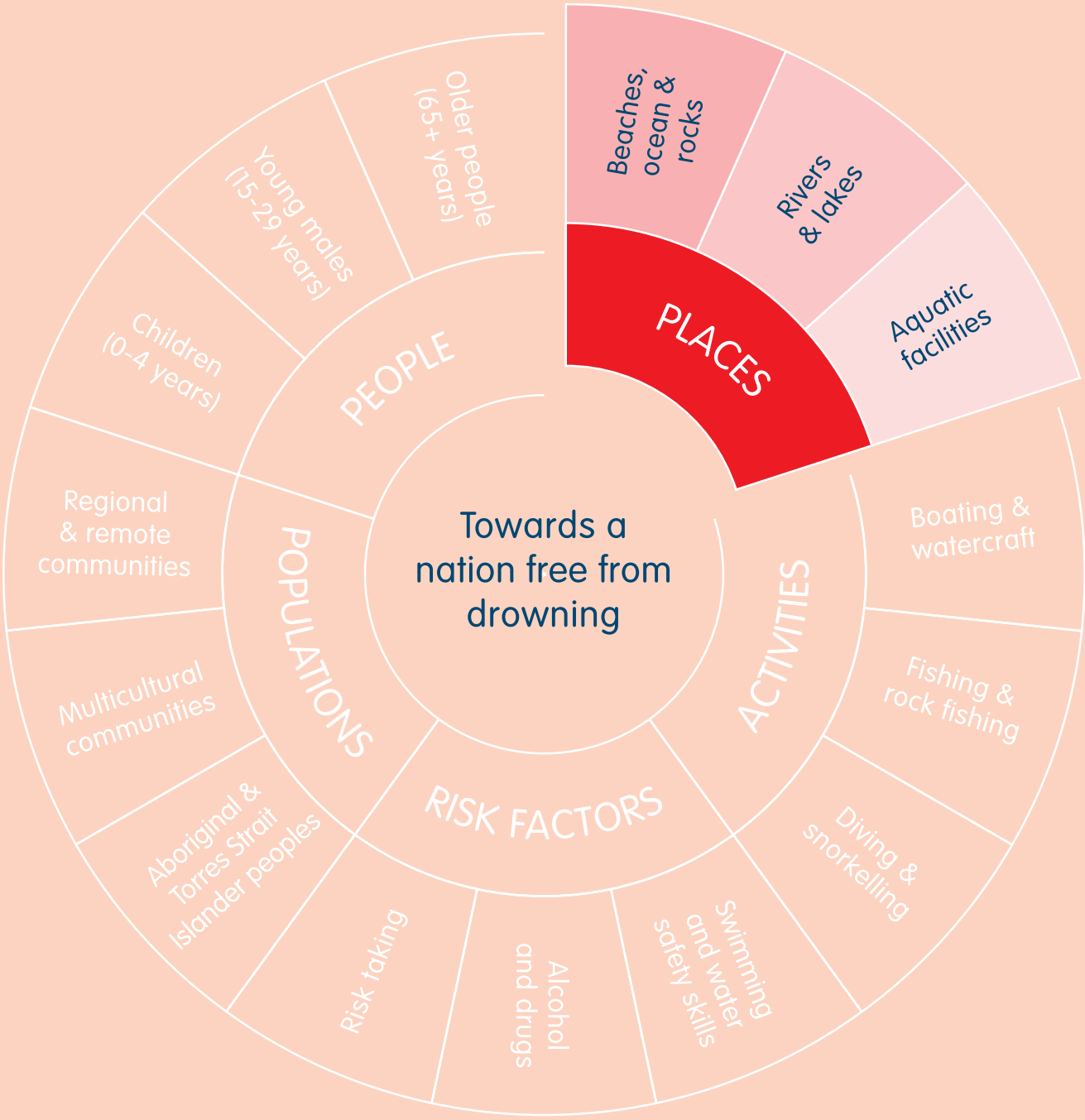
Why is this a Priority Area?

Drowning occurs in all types of aquatic environments and each environment poses unique risks. Conditions can change rapidly, particularly in and around natural waterways, and visitors may be unfamiliar with local hazards. Visitors need to be able to identify these hazards and respond appropriately.

Encouraging safe aquatic recreation is also important. Australian beaches, oceans, rivers, lakes and swimming pools provide opportunities for exercise, education and leisure. These locations provide significant value to local communities and future investment in infrastructure needs should be considered.

What can be achieved by taking this approach?

Targeted drowning prevention strategies enable environment-specific hazards to be addressed. It should be noted that local waterways require localised prevention strategies. Risk assessments undertaken at high-risk drowning locations can help to inform local risk management plans, in conjunction with relevant stakeholders.



PRIORITY AREA: PLACES

FOCUS:

Beaches, ocean and rocks

Why is this an area of focus?

The Australian coast is extensive with close to 12,000 beaches and 59,736 km of coastline. Spending time at beaches, on rock platforms and in the ocean is a popular pastime, with our coast being internationally recognised and making a significant economic contribution through the domestic and international tourism sectors.

Preventing drowning at beaches, oceans and rocks is a priority because coastal environments are dynamic and create diverse opportunities for recreation. They also present a variety of risks and hazards making coastal safety management complex, reaffirming beaches, oceans and rocks as priority locations for drowning prevention.

Too often, people visiting the coast do not recognise or underestimate the associated risks and hazards, exposing themselves and others to dangers unnecessarily. In addition, coastal environments record relatively high numbers of non-drowning-related fatalities, including interactions with wildlife and medical episodes or injuries, many of which are also preventable.

Key data (2009/10 to 2018/19)

1,143
drowning deaths

Average of 114
deaths per year

0.48 deaths/
100,000 population

Top 3 age groups
9% 20-24 years
9% 25-29 years
9% 60-64 years

Top 3 activities
27% Swimming and recreating
20% Boating
14% Diving

Over **300 million** coastal visitations*

11.1 million coastal activity participants*

314
Surf Life Saving clubs*

89,695 first aid treatments performed*

10,176
rescues performed*

Risk factors

- Inadequate safety preparation or equipment
- Inconsistent, or disregard of, lifejacket legislation
- Rip currents
- Risk-taking behaviour
- Poor or unexpected weather conditions
- Alcohol and drug consumption
- Lack of familiarity with environments and inexperience in activities
- Marine creatures (e.g., sharks, crocodiles, stingers)

Example actions

- Lifeguard and lifesaver services on popular beaches
- Targeted safety campaigns to raise awareness of hazards
- Legislation, such as rock fishing safety laws, in several States/Territories
- Enforced legislation regarding drink driving on vessels
- Access barriers and safety signage
- Installation of public rescue equipment in specific locations

*Data relates to 2018/19

Key activities 2021-2025

Research

- Expand coastal research to include non-drowning-related injury and fatalities
- Establish participation data to build accurate assessments of exposure
- Identify emerging risk pathways using innovative, multi-disciplinary research
- Input to the development of beach-based wave models to identify likelihood of rip currents and provide foundation for warning systems
- Evaluate new and existing interventions (e.g. signage, media campaigns and education programs)
- Improve understanding of usage of unpatrolled and remote locations

Policy

- Develop evidence-based coastal safety legislation/best practice
- Investigate legislative approaches to address coastal safety priorities
- Develop local water safety plans for key locations and communities

Advocacy

- Increase awareness of key coastal risk factors raised at National, State and Territory, and local levels
- Highlight the impact of risk-taking behaviour (e.g., alcohol, drugs, hazards) to key demographics
- Ensure opportunities for swimming and water safety education are available and accessible to people of all backgrounds and abilities

Collaboration

- Partner with Federal, State and Territory and Local Governments, National Parks and land and water management authorities
- Partner with high-risk communities to engage community-led risk management

Education

- Deliver coastal safety education, alcohol awareness, programs and campaigns
- Deliver basic lifesaving courses to targeted demographics or high-risk populations
- Promote rip current identification skills through workshops, media and online channels
- Deliver high-level training to build lifesavers' skills and establish sustainable training models

Safe environments

- Identify beach, ocean and rock blackspots across different environments and activities
- Review access and effectiveness of emergency infrastructure, including public rescue equipment installed at high-risk and unpatrolled locations
- Enhance surveillance patrols, search and rescue operations capabilities beyond patrolled areas
- Enhance beach risk ratings and warning notifications using higher resolution wave modelling
- Install appropriate safety signage, noting the importance of visual and multilingual information

Workforce

- Develop a multicultural lifesaver leadership program to extend the cultural reach and expansion of programs for people from diverse backgrounds
- Increase retention and recruitment of active lifesavers
- Implement mental health and resilience programs across coastal safety and emergency services
- Support Surf Life Saving workforce and membership through information and communications technology
- Upskill lifesaving personnel to extend response scope (e.g., swift water and disaster response)

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Understanding exposure rates for activities and popular coastal locations	Legislation targeting high-risk activities that is expanded nationally for consistency	Targeted coastal safety strategies implemented at blackspot locations	Appropriate actions in the case of an emergency	Risk-taking behaviour (particularly undertaken after alcohol or drug consumption)

Targets 2030

Leading in coastal safety service and systems through the implementation of innovative technologies and strategies World leading levels of lifesaving skills across all communities

Drowning rate at beaches, oceans and rocks reduced by 50%

PRIORITY AREA: PLACES

FOCUS:

Rivers and lakes

Why is this an area of focus?

Rivers and lakes continue to be a leading location for drowning. Rapidly changing conditions and hidden dangers, such as strong currents, submerged objects, slippery or crumbling banks and cold water, can lead to people getting into difficulty. Unlike other aquatic locations, inland waterways are not regularly patrolled by a lifesaving or maritime service. In the case of an emergency, timely medical assistance may be impacted by geographic isolation and a lack of telecommunication facilities.

Preventing drowning in rivers and lakes is a priority as inland waterways account for more than a third of location-based drowning. A diverse range of activities and exposure to hazards, as well as drowning risk factors, such as alcohol, being male and residing in rural and remote communities, makes drowning prevention in rivers and lakes challenging.

Key data (2009/10 to 2018/19)

1,009
drowning deaths

Average of 101
deaths per year

0.43 deaths/
100,000 population

Top 3 age groups
11% 25-29 years
9% 20-24 years
8% 45-49 years

Top 3 activities
20% Swimming and recreating
19% Fall
17% Non-aquatic transport

28% BAC ≥0.05%
(among those aged 15 years and over)

9% Aboriginal and Torres Strait Islander peoples

70%
Regional and remote

13%
Flood-related

Risk factors

- Underestimation of hazards and lack of familiarity with environments
- Unexpected or rapidly changing weather conditions
- Alcohol and drug consumption
- Risk-taking behaviour
- Swimming or recreating alone
- Limitations in swimming ability and water safety knowledge

Example actions

- Targeted safety campaigns to raise awareness of hazards
- Flood and weather warnings, including those targeting driving through floodwater
- Location-specific risk management plans
- Signage and safety information
- Development of local water safety plans
- Enforcement of alcohol-free zones
- Swimming and water safety programs tailored to inland waterways

Key activities 2021-2025

Research

- Standardise definitions to improve data consistency
- Conduct exposure studies to improve understanding of risk at inland waterways
- Evaluate new and existing interventions (e.g. signage, media campaigns and education programs)

Policy

- Strengthen policies requiring risk assessments for key locations and recreational user groups
- Promote adoption of Guidelines on Inland Waterways Safety by water authorities
- Develop local water safety plans for key locations and communities

Advocacy

- Deliver and evaluate campaigns highlighting risk-taking behaviour among males, including alcohol and drug consumption, recreating alone and dangerous entries into water
- Advocate for improvements in community access to waterways for recreational purposes
- Highlight the risks faced by agricultural workers on properties with unfenced water bodies, such as dams

Collaboration

- Build and strengthen partnerships with land management agencies, including Local and State and Territory Government, National Parks and Wildlife Services, water management authorities, and tourism and agricultural sectors
- Partner with disaster management agencies to address the risk of flood-related drowning

Education

- Deliver and evaluate programs tailored to communities at rivers and lakes
- Disseminate safety information through community groups and tourism operators

Safe environments

- Conduct local risk assessments to better understand environmental hazards, such as currents and slippery or crumbling banks, at high-risk rivers and lakes
- Investigate the feasibility of emergency help points, including rescue equipment, satellite phones at high-risk rivers and lakes
- Better integration of data monitoring river and lake conditions to support warning and alert systems
- Install appropriate safety signage, noting the importance of visual and multilingual information

Workforce

- Map the role of park rangers, environmental officers, tourism sector, police and other Government authorities in drowning prevention
- Incorporate drowning prevention measures into agricultural risk assessments and relevant training for workers

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Understanding risk, exposure and intervention effectiveness	Adoption of drowning risk management plans and policies by water managers	Community education programs delivered in rivers and lakes	Community understanding of river and lake hazards	Risk-taking behaviour in drowning at rivers and lakes

Targets 2030

Widespread use of drowning risk management planning for rivers and lakes, and recreational user groups
Drowning rate at rivers and lakes reduced by 50%

PRIORITY AREA: PLACES

FOCUS:

Aquatic facilities

Why is this an area of focus?

Aquatic centres comprise public and commercial swimming pools, and communal aquatic facilities such as pools at hotels, motels and caravan parks, but exclude private home pools. Most swimming pool drowning deaths occur in home pools, which are addressed in detail in the People Priority Area – Children (0-4 years).

Aquatic centres are used by all age groups for different purposes, including swimming and water safety education, exercise, rehabilitation and leisure. Although more highly regulated than other aquatic environments, drowning deaths still occur in public swimming pools and aquatic facilities.

Preventing drowning in swimming pools is a priority because public access to safe aquatic recreation is vital to reducing drowning in Australia. Aquatic facilities allow skill development and practice in a more controlled environment.

Key data (2009/10 to 2018/19)

80
drowning deaths

Average of 8
deaths per year

1,077 public aquatic facilities in Australia, most of which are owned by local councils*

The public aquatic industry sector employs approximately **67,000** workers*

The average public aquatic facility creates **$2.72 million** a year in value to the community*

On average, each Australian visits a public aquatic facility **4.4 times** a year, leading to 106 million individual pool visits annually*

73% of the aquatic industry workforce is **female**

47% of the aquatic industry workforce is employed on a **casual basis**

Risk factors

- Lack of active supervision by parents and carers for children
- Lack of swimming ability and water safety knowledge
- Pre-existing medical conditions and medications
- Alcohol consumption (communal pools)

Example actions

- Implementation of risk management procedures
- Lifeguards to supervise patrons and respond in case of an emergency (public pools)
- Codes of practice and safety guidelines
- Industry programs to promote supervision of children, weak swimmers and non-swimmers
- Signage and safety information
- Industry programs targeting vulnerable swimmers at aquatic facilities
- Swimming and water safety education for people of all ages and backgrounds

*Data relates to public aquatic facilities (public swimming pools)

Key activities 2021-2025

Research

- Expand research to include non-drowning-related injuries at aquatic facilities
- Investigate local infrastructure requirements in high-growth areas and regional areas
- Evaluate and expand the impact of the Guidelines for Safe Pool Operations
- Expand research into the effectiveness of lifeguard supervision

Policy

- Advocate codes of practice for communal aquatic facilities
- Standardise incident reporting and data collection procedures across the aquatic industry

Advocacy

- Promote active adult supervision of children, weak swimmers and non-swimmers
- Promote and review best practice industry guidelines
- Promote the health, social and economic benefits of the aquatic industry to policy makers

Collaboration

- Standardise messaging in existing child supervision programs
- Strengthen partnerships with the tourism and hospitality sector, including accommodation providers such as hotels, motels, and caravan parks with communal swimming pools

Education

- Expand access to effective, evidence-based programs and services
- Strengthen user education approaches and tools including those targeting inclusive practices
- Build learn to swim pathways from swimming pools to open water environments

Safe environments

- Ensure all venues conduct and implement regular risk assessments
- Ensure risk is factored into the safe design of aquatic facilities
- Install public safety and emergency equipment at communal swimming pools
- Install appropriate safety signage, noting the importance of visual and multilingual information
- Ensure facilities are available and accessible to people of all backgrounds and abilities

Workforce

- Extend professional development opportunities provided for the aquatic industry workforce
- Strengthen lifeguard training, including scanning, positioning and response techniques
- Introduce strategies to address mental health concerns among lifeguards

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Understanding risks and prevention	Infrastructure plans, funding availability and developments	Use of best practice industry guidelines	Importance of active supervision among parents and carers	Patron behaviour in terms of responsibility for their own health and safety in aquatic facilities

Targets 2030

Increased availability and sustainability of aquatic facilities

Drowning rate at aquatic facilities reduced by 50%

PRIORITY AREA

Activities

Swimming as a risk factor

Swimming and recreating is the leading activity being undertaken prior to drowning in most locations, including coastal and inland waterways. Swimming and recreating has accounted for 23% of deaths between 2009/10 and 2018/19.

Swimming skills and ability impact on safety across many other activities including boating, watercraft and falls.
Swimming and water safety skills are vital for people of all ages and populations, and in all places. A lack of appropriate skills or an overestimation of skills is a significant risk factor for drowning.

Given the cross-sectional importance of swimming, the AWSC considered how best to highlight swimming and recreating in this strategy – the options were either as an activity or as a risk factor. It was decided that to reinforce the importance of swimming across all sections of the AWSS 2030, swimming would be addressed as a Risk Factor.

This approach allows the AWSS 2030 to focus on risks associated with swimming in a range of locations and activities, as well as to reinforce the principle that all Australians, young and old, must be given opportunities to learn swimming and water safety skills in pools and in open water, and to encourage swimming for fun, fitness and good health.

Why is this a Priority Area?

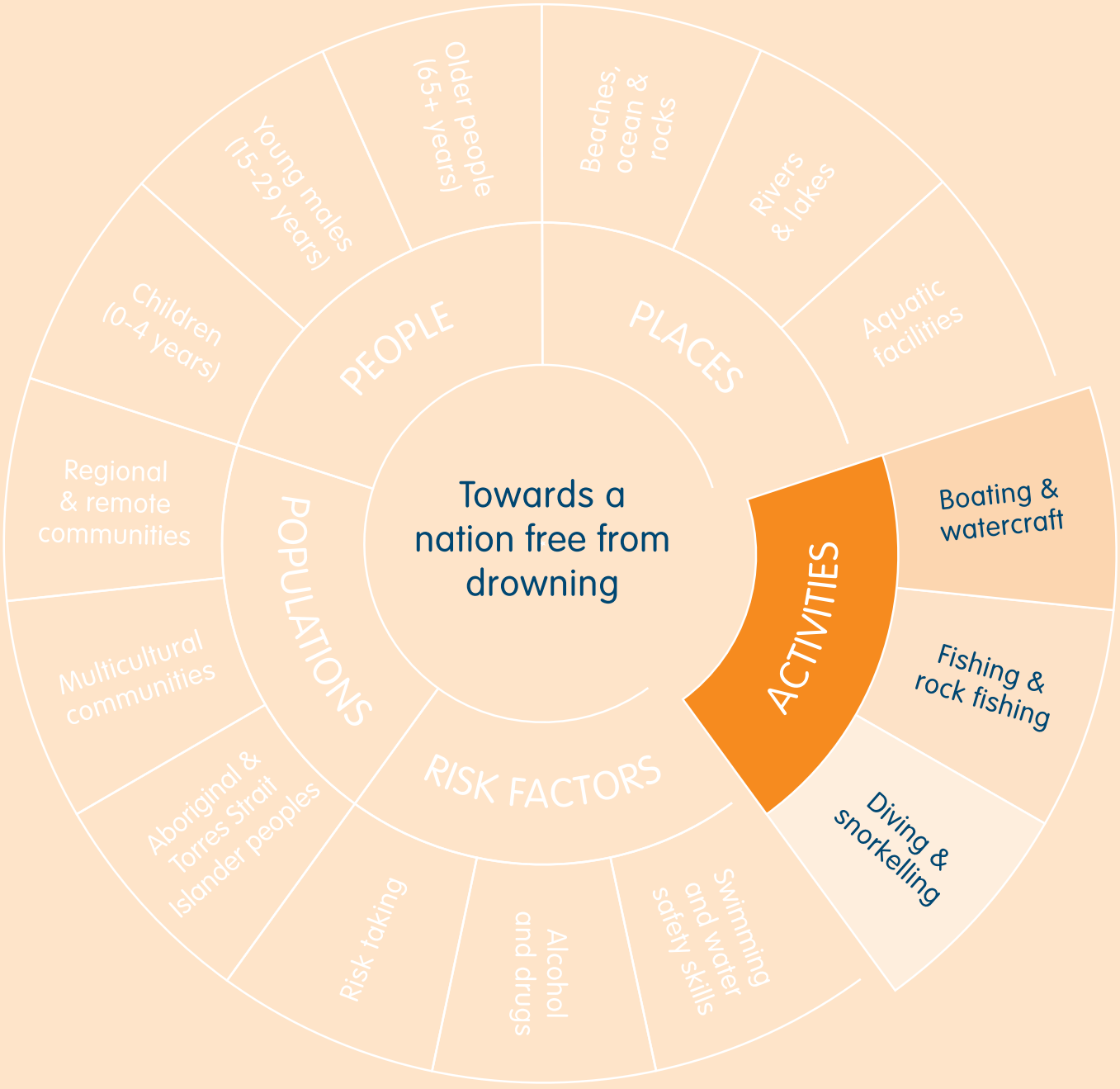
People undertake a range of activities in, on and around the water, with many of these pursuits increasing in popularity in recent years. However, there are inherent risks associated with many of these activities.

Often, the risks are exacerbated by inexperience, poor or inadequate equipment, poor weather conditions and failing to take appropriate safety precautions.

What can be achieved by taking this approach?

Different aquatic activities carry different risks. These risks can be minimised with appropriate safety equipment, education and experience. By identifying high-risk activities, drowning prevention strategies can be targeted to activity-specific risk factors.

Codes of practice, legislation and safety standards all contribute to making aquatic activities safer for participants.



PRIORITY AREA: ACTIVITIES

FOCUS:

Boating and watercraft

Why is this an area of focus?

Boating and watercraft activities are increasingly popular across Australia. An estimated 20% of the population participate in boating and watercraft-based activities annually. Drowning is the leading cause of boating-related fatalities, and while drowning deaths have steadily decreased over time, more work is required to address factors such as lifejacket wear and boating under the influence of alcohol. Boating makes significant social and economic contributions, from the proven health and wellbeing benefits of getting on the water, to supporting industry and jobs in manufacturing, tourism and leisure sectors.

Boating includes registered or non-registerable vessels that are powered by wind or motors, including motorboats, sailboats, catamarans and personal watercraft (PWC, also known as jet skis). Watercraft includes non-powered recreational equipment that require physical input from a person (e.g., surf boards, stand-up paddle boards, body/boogie boards, wind surfers, kayaks, canoes, rowboats, inflatable rafts and inflatable boats without motors).

Key data (2009/10 to 2018/19)

488 drowning deaths	**Average of 49** deaths per year	**0.21 deaths/** 100,000 population

Top 3 age groups
9% 35-39 years
9% 55-59 years
9% 60-64 years

Top 3 locations
50% Ocean/harbour
21% River/creek
16% Beach

93% Male

34% Pre-existing medical condition

70% Boating
30% Watercraft

15% BAC ≥0.05%
(among those aged 15 years and over)

Risk factors

- Failure to wear or correctly fit a lifejacket
- Failure to take adequate safety precautions, such as proper lookouts and excessive speed
- Poor or unexpected weather conditions
- Inadequate maintenance of equipment
- Inexperience with equipment, waterways and weather conditions
- Risk-taking behaviour
- Alcohol and drug consumption

Example actions

- Legislation requiring licensing of skippers and registration of vessels
- Safety recommendations including lifejackets, Emergency Position Indicating Radio Beacon (EPIRB) and regular maintenance
- Enforced legislation regarding drink and drug driving of vessels
- Safety campaigns to promote safe behaviours
- Equipment maintenance schedules
- Weather advice, alerts and relevant Apps
- Training programs

Key activities 2021-2025

Research

- Investigate boating and watercraft drowning deaths, other fatalities and injuries
- Expand the use of participation measures, such as vessel registration, licences issued, watercraft sales and exposure studies
- Evaluate boating and watercraft safety campaigns and education programs

Policy

- Strengthen legislation in the areas of lifejacket wear, alcohol consumption, licensing and registration in all jurisdictions
- Establish systems that measure and report lifejacket wear rates, boating participation and economic impact of the sector
- Monitor and report on compliance and enforcement of legislative requirements

Advocacy

- Advocate the strengthening of safety standards (e.g., lifejackets, vessels, equipment)
- Deliver coordinated boating safety campaigns at a National, State and Territory and local level

Collaboration

- Strengthen collaboration across National, State and Territory and local boating stakeholders, including retailers
- Support pathways into recreational boating and watercraft clubs

Education

- Deliver boating safety campaigns with maritime safety partners that address safe trip planning, vessel standards, safety equipment, overloading and risk-taking behaviour
- Expand the delivery of safe boating community education and awareness programs
- Strengthen boating driver training capability
- Strengthen the role of retailers in safety and boating education in partnership with State and Territory Boating Safety Agencies
- Strengthen voyage planning education programs to improve decision making based on weather hazards and information

Safe environments

- Review and maintain boating infrastructure (e.g., boat ramps, lighting, channel markers)
- Install telecommunication in remote (popular) locations
- Expand boating safety officer programs and resources for all waterways

Workforce

- Enhance professional development of the maritime safety workforce

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Systems for data collection to inform maritime safety policies and strategies across Australia	Effectiveness of lifejacket and boating safety legislation, and its enforcement in all States and Territories	Availability and effectiveness of evidence-based community boating, boat driver training and watercraft education programs	Boating and watercraft safety among boat and watercraft users	Numbers of adults and children wearing lifejackets on the water

Targets 2030

Increased rates of lifejacket use among adults and children
World leading compliance and enforcement systems
Drowning rate related to boating and watercraft reduced by 50%

PRIORITY AREA: ACTIVITIES

FOCUS:

Fishing and rock fishing

Why is this an area of focus?

Recreational fishing is a popular outdoor activity in Australia and is one of the few forms of nature-based recreation that can generally be enjoyed through all life stages, providing the opportunity to develop skills, techniques and knowledge through long-term participation. Participation rates suggest that approximately one in four Australian households consist of at least one recreational fisher. People fish from the beach, in the river, from rocks, and from boats or other watercraft.

Despite the benefits, fishing can also be very dangerous. In fact, rock fishing alone has been dubbed Australia's most dangerous sport and is responsible for drowning deaths every year. Many boating- or watercraft-related drowning deaths occur during fishing trips. The range of recreational fishing activities highlights a number of water safety challenges and the need for diverse, multi-faceted and targeted approaches to ensure safe fishing practice.

Key data (2009/10 to 2018/19)

171
drowning deaths

Average of 17
deaths per year

0.07 deaths/
100,000 population

Top 3 age groups
13% 60-64 years
12% 30-34 years
11% 25-29 years

Top 3 locations
71% Rocks
13% River/creek
6% Lake/dam

28% Pre-existing medical condition

94% Male

70% Rock fishing
30% Fishing

Risk factors

- Failure to wear or correctly fit a lifejacket
- Fishing alone
- Failure to take adequate safety precautions and equipment
- Poor or unexpected weather conditions, including poor visibility
- Inexperience and poor understanding of hazards
- Unfamiliar environments
- Risk-taking behaviour
- Alcohol and drug consumption

Example actions

- Targeted safety campaigns to raise awareness of hazards
- Rock fishing safety legislation
- Access barriers and safety signage
- Installation of public rescue equipment in specific locations
- Development and distribution of safety information
- Technological approaches that educate and transform perceptions and behaviours

Key activities 2021-2025

Research

- Investigate impacts of non-fatal drowning and injury incidents in recreational fishing
- Conduct behavioural research to understand risk perception and decision-making
- Investigate high-risk locations and evaluate opportunities to extend service provision, including alternative and innovative technological approaches
- Evaluate current safe fishing education programs and initiatives

Policy

- Review current safe fishing practices, campaigns, equipment and programs
- Review effectiveness of fishing legislation, licensing and lifejacket legislation

Advocacy

- Promote lifejacket safety awareness and consistency across National, State and Territory and local levels
- Raise awareness of safe fishing practices through multiple channels
- Advocate safe fishing plans at blackspot locations with community and Government

Collaboration

- Strengthen collaboration across National, State and Territory and local fishing stakeholders
- Establish partnerships with peak fishing bodies to increase community-led risk management and engagement
- Support pathways into recreational fishing and rock fishing clubs

Education

- Develop and implement safe fishing initiatives and programs to promote safe practices
- Utilise education technologies to transform behaviour and perceptions of risk
- Strengthen weather forecasting and warning systems targeted at rock fishing

Safe environments

- Identify blackspot locations based on fishing incidents at rocks, beaches, and rivers
- Review access to public rescue equipment at high-risk locations
- Extend and evaluate emergency infrastructure installation at new locations

Workforce

- Develop workforce leadership programs for recreational fishing communities
- Establish a safe fishing committee/working group to guide communication and research

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Information dissemination	Consistent legislation across States and Territories for fishing licensing and use of lifejackets	Evidence-based safe fishing strategies at blackspot locations	Community understanding of the influence of environmental conditions	Number of people wearing a lifejacket and the use of an Emergency Position Indicating Radio Beacon (EPIRB)

Targets 2030

Safe fishing legislation and equipment integrated to maximise opportunities for behaviour change
Safe fishing plans developed and implemented for key blackspot fishing locations
Drowning rate related to fishing and rock fishing reduced by 50%

PRIORITY AREA: ACTIVITIES

FOCUS:

Diving and snorkelling

ACTIVITIES

Why is this an area of focus?

Diving and snorkelling are popular activities, both recreationally and commercially. They are significantly integrated within the Australian tourism and commercial sectors. Typically, scuba diving involves using an underwater breathing apparatus that is usually self-contained but can be from a source at the surface (e.g., hookah). Snorkelling is swimming with the aid of a mask and snorkel and, often, fins.

Generally, the safety requirements for snorkelling reflect many of those for diving, including adequate physical and medical fitness, sufficient skills, and comfort in the water. More snorkellers die nationally than divers, in part due to higher participation, but also because it requires less aquatic training and experience. Due to increases in related drowning deaths, diving and snorkelling have also become a national focus for water safety.

Key data (2009/10 to 2018/19)

174 drowning deaths	**Average of 17** deaths per year	**0.07 deaths/** 100,000 population

Top 3 age groups
12% 30-34 years
11% 40-44 years
10% 60-64 years

Top 3 locations
55% Ocean/harbour
34% Beach
5% Rocks

29% Pre-existing medical condition

Most **diving**-related drowning deaths occur in offshore waters

Snorkelling-related deaths often occur at coastal beaches

Risk factors

- Poor medical fitness, especially age-related cardiac issues (often undiagnosed)
- Poor planning and failure to take adequate safety precautions
- Inexperience and inadequate skills
- Equipment inadequacies
- Hypoxic blackout from extended breath-holding
- Anxiety

Example actions

- Full training program and certification required for diving
- Skills orientation and assessment required for snorkelling
- Medical checks (preferably by specialist diving doctor)
- Regular checks and maintenance of equipment
- Tourist management programs, including risk assessments
- Strengthening the use of the 'buddy system'

Key activities 2021-2025

Research	• Collect, analyse and report on diving-related deaths and non-fatal incidents • Examine any existing Codes of Practice for relevance, adherence and effectiveness
Policy	• Encourage the introduction of Codes of Practice in States and Territories where none exist • Strengthen policies requiring oxygen first aid equipment and a trained provider at all sites • Strengthen policies requiring medical examination for all divers with a significant medical condition, including all divers over 45 years of age
Advocacy	• Deliver diving safety campaigns, workshops and information dissemination • Advocate for State and Territory systems for the collection and analysis of diving incident data
Collaboration	• Partner with diving industry stakeholders to share certification and activity data • Strengthen collaboration at a National, State and Territory and local level on policy and safety campaigns • Strengthen partnerships with the tourism sector to better engage with domestic and international tourists • Support pathways into recreational diving and snorkelling clubs
Education	• Promote the inclusion of diving medicine orientations in all medical training courses • Provide education on the risks of diving and snorkelling with pre-existing medical conditions • Reinforce the importance of an effective buddy system in facilitating a faster rescue • Provide factual education on the prevention and management of decompression illness
Safe environments	• Promote the recognition and adherence of the diver down flag (scuba flag) system for all boat operators • Create specific artificial reefs and marine reserves as dedicated, fishing-free, diving areas
Workforce	• Develop and enhance professional development and safety practices across the workforce

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Understanding the risks for older and/or obese divers, inexperienced divers and users of rebreathers	Adoption and adherence to Codes of Practice for dive and snorkel operators	Policies requiring a medical examination for diving among older divers and those with pre-existing medical conditions	Impact of health conditions on diving safety, and the need for regular diving specific medical examinations	Dive planning, regular equipment maintenance, and closer buddy positioning and monitoring

Targets 2030

All dive operations have appropriate oxygen first aid equipment and trained providers on site
Industry-wide adoption of risk management, including the risks associated with common medical conditions in older divers
Drowning rate related to diving and snorkelling reduced by 50%

PRIORITY AREA

Risk factors

Why is this a Priority Area?

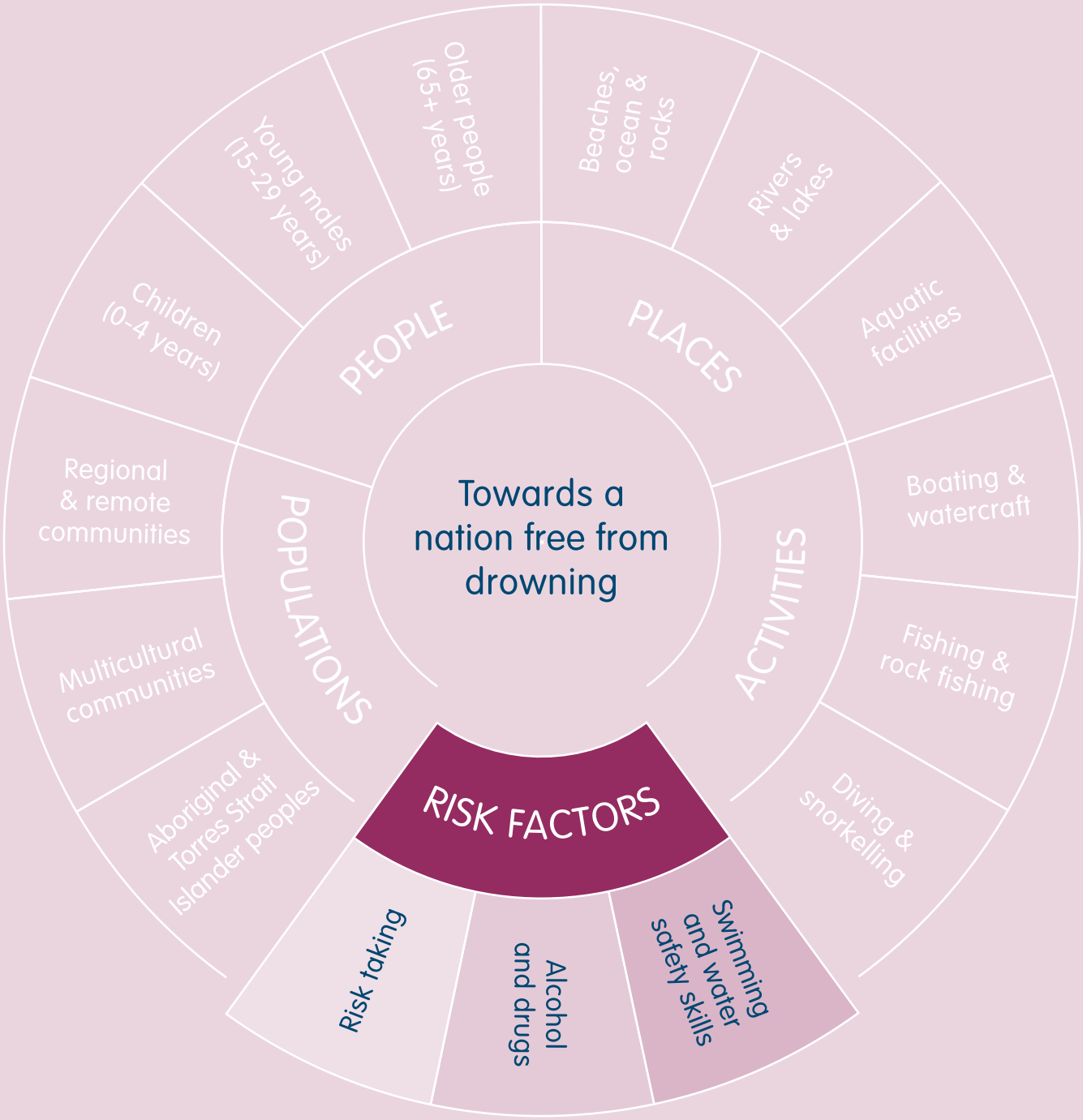
The risk factors identified are not relevant to any one Priority Area in particular but are relevant across all Priority Areas.

Although already highlighted in many of the Focus Areas, risk factors play a significant role in the broader objectives of the Australian Water Safety Strategy. For this reason, overarching risk factors have been recognised as crucial to a cohesive and collaborative approach. For example, swimming and water safety skills are vital to preventing drowning across the lifespan. A lack of ability and knowledge contributes to drowning in all environments and activities. Significant barriers to achieving the required skills hamper progress in all Priority Areas.

What can be achieved by taking this approach?

A focus on cross-cutting risk factors can address common themes across multiple Priority Areas. For example, alcohol consumption is a risk factor for drowning among many age groups, places and activities. Therefore, reducing alcohol-related drowning cannot be achieved by focusing on one demographic, place or activity, and requires a cooperative approach across all stakeholders.

Although resources can be shared, tailored approaches are needed to target nuanced differences in the identified risk factors across the Priority Areas.



PRIORITY AREA: RISK FACTORS

FOCUS:

Swimming and water safety skills

Why is this an area of focus?

Swimming and water safety skills are widely recognised as the key to preventing drowning, with a lack of swimming skills and water safety knowledge considered to be a major risk factor for drowning. Drowning in open water environments reinforces the importance of learning a full range of swimming, water safety and survival skills, and a knowledge of hazards and risks in different locations and situations. In order to reduce the rate of drowning while swimming, a strong focus on swimming and water safety skills is needed.

The development of swimming and water safety skills in children continues to be a concern, with up to 40% of children leaving primary school unable to achieve the minimum National Benchmark for swimming and water safety skills. Research shows that participation in commercial learn to swim programs declines before 8 years of age, well before many children have developed a comprehensive set of swimming and water safety skills.

Access to swimming and water safety education is not evenly spread across all populations. Research shows inequalities in rural and remote communities, those from lower socioeconomic areas, multicultural communities, and Aboriginal and Torres Strait Islander peoples, who are all less likely to be attending swimming and water safety education programs.

Little is known about the swimming competency and skill retention of adults. Adults drown due to a combination of factors, including a lack of swimming skills and water safety awareness, inexperience and risk-taking behaviour. Further work is required to ensure that everyone, regardless of age, ability and background has the opportunity to learning swimming, lifesaving and water safety skills.

Key data

More than **1.5 million children** aged 0-14 years participate in organised swimming outside of school programs every year

32% of children aged 0-14 participate in organised swimming activity outside of school at least once per year

Average cost of a lesson is **$15.50**

40% of children do not achieve the National Benchmark of swimming 50m by the time they are 12 years old

School-aged children (5-14 years) record the lowest age-specific drowning rate in Australia

The locations associated with the greatest drowning risk for children **aged 5-14 years** are open water environments

Key points

- Lack of swimming and water safety skills may contribute to drowning in all ages
- Barriers include lesson cost, residential location, socioeconomic status and cultural background
- Adults from multicultural backgrounds may be less likely to have been taught swimming and water safety skills in childhood and are less likely to participate in aquatic activities

Example actions

- School-based swimming and water safety programs in every State and Territory
- Subsidised vacation swimming programs
- Grants to promote access to swimming and water safety education
- Revision of the National Swimming and Water Safety Framework
- Vouchers to subsidise the cost of swimming and water safety education
- Increased aquatic facility infrastructure in regional and remote locations

Key activities 2021-2025

Research

- Evaluate the effectiveness of swimming and water safety programs for all ages
- Enhance research and improve data collection relating to the swimming and water safety skills of children, teenagers and adults

Policy

- Strengthen Government commitments to school, vacation-based and other programs, including those provided in open water environments
- Explore the effectiveness of voucher programs that can be utilised for swimming and water safety programs

Advocacy

- Highlight the need for increased programs for populations considered vulnerable to drowning
- Advocate for increased use of swimming and lifesaving programs in secondary schools
- Ensure opportunities for swimming and water safety education are available and accessible to people of all backgrounds and abilities
- Generate high level support for swimming and water safety skills for all

Collaboration

- Partner to establish policy, education program content and campaigns
- Establish a National database on children's swimming and water safety skills

Education

- Increase the availability of programs for children, families and communities
- Implement and evaluate the National Swimming and Water Safety Framework
- Strengthen pathways from basic swimming and water safety programs into higher skill development

Safe environments

- Increase investments in infrastructure in regional and remote areas to provide venues for swimming and water safety education, as well as recreational swimming
- Increase access to a range of safe environments to enable the transfer of skills from pools to open water

Workforce

- Expand professional development systems for swimming, water safety and lifesaving teachers/instructors
- Promote vocational and career pathways in the aquatic industry

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Data and research to inform swimming and water safety policy and advocacy	Policies that increase access to swimming and water safety education, including increased availability of infrastructure	Expansion of swimming and water safety programs, alongside increase in the number of children meeting the National Swimming and Water Safety Framework milestones	Understanding of the value of swimming and water safety skills for children, teenagers and adults	Number of children in school-based education programs and adults enrolling in swimming and water safety programs (all levels)

Targets 2030

World leading swimming and water safety skills for children and young adults

Equitable access to swimming and water safety education programs in all States and Territories

PRIORITY AREA: RISK FACTORS

FOCUS:

Alcohol and drugs

Why is this an area of focus?

Alcohol continues to be a significant contributing factor in drowning and aquatic-related injury. One in every five drowning deaths among people aged 15 years and over recorded a BAC greater than or equal to 0.05%. Alcohol consumption impairs cognitive function, decision making, risk perception and reaction time, all of which may increase the risk of drowning. Alcohol-related drowning deaths occur across the adult lifespan, in urban and regional areas, and among both men and women. The National Drug Strategy Household Survey found swimming to be the second most likely risky activity undertaken while under the influence of alcohol (10). Exceeded only by the likelihood of driving a motor vehicle, this survey highlights how common it is to participate in aquatic activities following the consumption of alcohol.

Illicit drug use is also a risk factor for drowning. Illegal substances can numb the senses, reduce inhibitions and distort the perception of risk. The most common illicit drugs involved in drowning deaths are cannabis and methamphetamine. It is important to note that legal drugs, such as prescription and over the counter medicines, can also increase the risk of drowning, however, this focus area will concentrate on illegal drugs.

Key data (2009/10 to 2018/19)

467 alcohol-related drowning deaths*
224 illegal drug-related drowning deaths**

Average of **47** alcohol-related deaths per year
Average of **22** drug-related deaths per year

Top 3 locations
Alcohol-related
42% River/creek
12% Lake/dam
12% Swimming pool

Drug-related
38% River/creek
16% Lake/dam
14% Beach

Top 3 activities
Alcohol-related
26% Swimming and recreating
20% Fall
14% Boating

Drug-related
25% Swimming and recreating
16% Unknown
13% Boating

56% of alcohol-related deaths occurred overnight (6:01pm to 6am)

42% of drug-related deaths occurred overnight (6:01pm to 6am)

Key points

- Alcohol and drug consumption leads to risk-taking behaviour
- Alcohol consumption is a widespread issue relevant to all age groups and both sexes
- Potential additive effects when alcohol consumption combined with drug use
- Alcohol-related drowning is more likely at certain times of year (e.g., public holidays), while alcohol and drug-related drowning is more likely at certain times of the day (e.g., evening and early morning)

Example actions

- Mass media campaigns, predominantly targeting young adults and males
- Education programs targeting secondary school students
- Restrictions prohibiting alcohol consumption in public aquatic locations
- Enforced legislation regarding drink driving of vessels

*All figures correspond to cases where BAC ≥0.05% among those aged 15 years and over

** All figures correspond to cases where illegal drugs were present among those aged 15 years and over

Key activities 2021-2025

Research	• Investigate all factors in alcohol and drug-related drowning, including influence of peers and decision making • Evaluate the effectiveness of alcohol and drug-focused water safety campaigns • Investigate links between alcohol advertising and risk-taking behaviour around water
Policy	• Advocate policies that reduce links between alcohol advertising and aquatic risk taking • Increase breathalysing of boat users at all water locations • Conduct risk assessments and associated mitigations in fall-related blackspots
Advocacy	• Target areas where alcohol consumption and drowning prevention intersect with the retail, hospitality and tourism sectors • Deliver targeted evidence-based campaigns, noting times of heightened risk for optimal message delivery • Frame alcohol-related drowning as an issue which affects everyone
Collaboration	• Partner with alcohol and drug-related health promotion organisations to identify and prioritise effective alcohol and drug-related campaigns and programs
Education	• Align education on risks of combining alcohol and drugs with aquatic behaviour with school curricula in all States and Territories • Explore and use online and new media to educate relevant groups
Safe environments	• Establish and enforce alcohol-free zones in high-risk locations
Workforce	• Support professionals responsible for the implementation and enforcement of alcohol and drug-related legislation

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Understanding alcohol and drug-related factors and intervention effectiveness	Policies focused on alcohol-free zones and policing of alcohol consumption laws related to boating	Alcohol and drug messaging in targeted education and training programs, as well as campaigns	Ability to recall messaging relating to key campaigns highlighting the risk of alcohol and drug consumption around water	Alcohol and drug-related risk-taking behaviours around water

Targets 2030

Consumption of alcohol and drugs before and during aquatic activities reduced

Drowning rate related to alcohol and drugs reduced by 50%

FOCUS:

Risk taking

Why is this an area of focus?

Understanding how people perceive risk helps to develop more effective public safety strategies. Early exposure, upbringing and environmental factors, including socioeconomic factors, are thought to be the most influential in shaping individual and community perceptions of risk. People are thought to amplify the risks associated with infrequent and catastrophic events, such as a shark attack, and underestimate the risks associated with frequent events, such as swimming in a current. An individual's motivation to take action is a balance of their own perceived vulnerability and the severity of an event.

Our ability to perceive risk can be impaired by factors such as alcohol, peer pressure and a lack of understanding. Risk perception can also be developed over time and may vary by activity. For example, a perception bias was identified among inexperienced rock fishers who misunderstood dangerous wave behaviour, while experienced fishers were able to perceive environmental conditions and read wave periods to identify and respond to any associated risks before it was too late (11). There is increasing interest to better understand the theories behind risk perception in water safety and the motivation for adaptation or change as knowledge and perceptions can drive behaviour change.

Key themes

Key points

- Overestimation of ability and underestimation of risk lead to inaccurate risk perception
- Behavioural, attitudinal and social determinants have an impact on the perception of risk
- Alcohol consumption and drug use increase the likelihood of risk-taking behaviour
- Poor understanding of hazards, risk and context can lead to risk-taking behaviour
- Cultural background and socioeconomic status influence risk perception
- Inexperience or lack of exposure can contribute to misjudging risky situations

Example actions

- Targeted campaigns that challenge thought–risk processes and behaviours among high-risk demographics
- Safety campaigns that use influencers to share responsibility of water safety
- Culturally appropriate swimming and water safety programs
- Safety workshops to develop awareness and understanding for high-risk activities

Key activities 2021-2025

Research	• Investigate all facets of risk perception and risk-taking behaviours • Explore innovative technological approaches to addressing risk
Policy	• Ensure water management authority policies address relevant risk-taking behaviours and include mitigation strategies to reduce risk • Ensure that all recreational activities develop policies that address risk taking
Advocacy	• Develop campaigns that target risk perception across all life stages • Enhance approaches to risk communication across the water safety sector
Collaboration	• Partner with recreational groups to raise awareness of risk profiles in middle life stages • Engage youth advocates in the development of programs targeting risk perception • Work with appropriate champions and peer influencers to better engage with target audiences
Education	• Deliver educational programs targeting drowning risk • Ensure educational programs reflect best practice approaches to risk perception
Safe environments	• Identify and implement targeted measures at risk-taking blackspots • Identify and implement targeted measures for risk-taking activities
Workforce	• Expand sector-wide capacity to understand and translate risk into programs and actions

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Knowledge of risk perception and risk-taking behaviours	Policies related to known risk-taking blackspots and activities	Evidence-based and risk-based communications across the water safety sector	Community understanding of risk	Key risk-taking behaviours around water

Targets 2030

Understanding of the role of risk perception and risk taking in drowning and its prevention increased

Reduced risk-taking behaviour around water

PRIORITY AREA

Populations

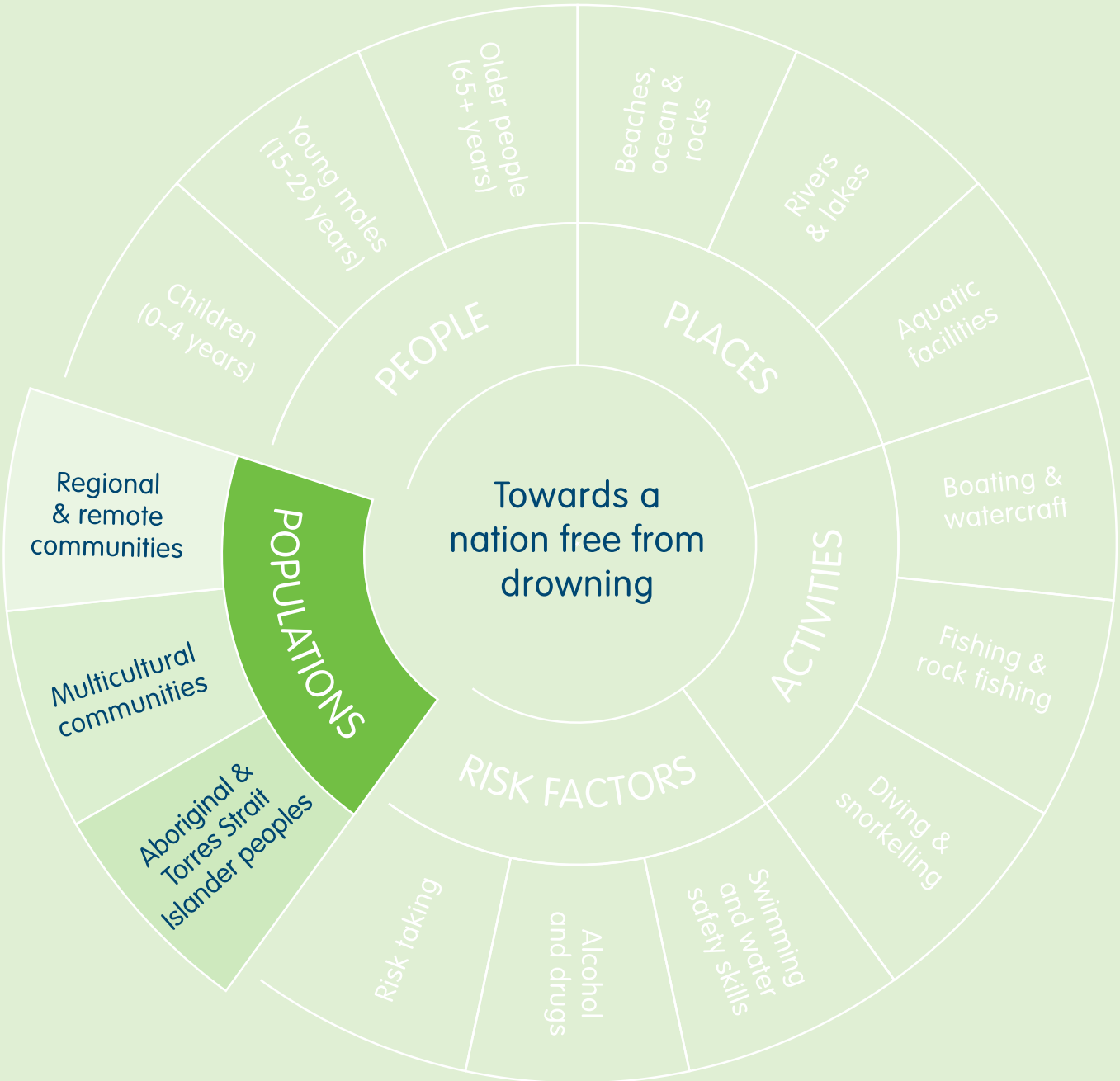
Why is this a Priority Area?

Certain populations are known to be at higher risk of drowning. This may be due to a number of factors, such as cultural background, residential location and socioeconomic status. Improved drowning data and availability of demographic information has allowed in-depth analysis of who is drowning in Australia, with emerging trends identifying certain populations as being at higher risk.

Some populations are missing out on accessing swimming and water safety education programs, often due to their social determinants of health. For example, children from Aboriginal and Torres Strait Islander, multicultural and low-socioeconomic backgrounds have previously been found to have lower levels of swimming and water safety skills, and are less likely to achieve the skills identified in the National Swimming and Water Safety Framework due to various reasons, including cost, access, medical conditions and cultural factors.

What can be achieved by taking this approach?

Identifying key populations that are considered vulnerable to drowning means that strategies can be tailored effectively to meet the needs of each population or subpopulation by addressing risk factors specific to that population. A one-size fits all approach does not work, similar to the way different strategies are required for different age groups and locations.



PRIORITY AREA: POPULATIONS

FOCUS:

Aboriginal and Torres Strait Islander peoples

Why is this an area of focus?

Many Aboriginal and Torres Strait Islander communities have a close cultural connection with country (land and water), which includes waterways. Aboriginal and Torres Strait Islander peoples also experience higher rates of drowning and injury-related mortality and morbidity. Aboriginal children are known to have a higher rate of fatal and non-fatal drowning compared with non-Aboriginal children, and many lack access to swimming and water safety programs.

Concerted effort has been made to address drowning in remote Aboriginal communities. Swimming pools in remote locations and in Aboriginal and Torres Strait Islander communities provide an opportunity to improve overall health and social outcomes among people of all ages. Extending the reach of these programs and evaluating their effectiveness is both an opportunity and a key challenge.

Key data (2009/10 to 2018/19)*

151 drowning deaths	**Average of 15** deaths per year	**1.95 deaths/** 100,000 population

Top 3 locations
47% River/creek
13% Swimming pool
11% Lake/dam

Top 3 activities
25% Swimming and recreating
21% Fall
10% Non-aquatic transport/Unknown

Top 3 age groups
17% 0-4 years | 11% 45-49 years | 10% 20-24 years

Aboriginal and Torres Strait Islander peoples account for **5% of all drowning deaths** but 3% of the Australian population

38% Remote and very remote compared with 10% among non-Aboriginal and Torres Strait Islander peoples

Risk factors

- Lack of supervision of young children
- Alcohol and drug consumption
- Swimming or recreating alone
- Socioeconomic status
- Lack of swimming and water safety skills
- Geographical remoteness

Example actions

- Removing barriers (e.g., access, cost, cultural appropriateness) to participation
- Increasing access to culturally appropriate water safety and swimming education programs in regional and remote communities
- Supporting swimming pools in remote locations
- Building community capacity and leadership through culturally appropriate training in first aid, CPR and lifesaving
- Incorporating drowning prevention into community-based health programs
- Strengthening relationships with Aboriginal and Torres Strait Islander organisations

*Where Indigenous status was known

Key activities 2021-2025

Research

- Support Aboriginal and Torres Islander-led and community engaged research, including qualitative research
- Investigate contributing factors to drowning in Aboriginal and Torres Strait Islander communities
- Evaluate the effectiveness of relevant campaigns, programs and services

Policy

- Strengthen availability and sustainability of swimming pools in remote Aboriginal communities
- Align water safety to health, education and employment policies and programs, including Closing the Gap targets

Advocacy

- Campaign for improved access to culturally appropriate programs and services
- Advocate for increased investments in water safety for Aboriginal and Torres Strait Islander communities
- Encourage organisations to develop a Reconciliation Action Plan

Collaboration

- Establish a National Aboriginal and Torres Strait Islander Water Safety Reference Group
- Reinforce local partnerships with community members and organisations
- Develop drowning prevention strategies and programs that are led by Aboriginal and Torres Strait Islander peoples and supported by the water safety sector

Education

- Increase accessibility and availability of culturally appropriate water safety, swimming and lifesaving programs
- Deliver culturally safe and responsive swimming and water safety programs that are co-designed with, and delivered by communities
- Deliver community education with a focus on adults aged 45+ years, alcohol and river safety

Safe environments

- Advocate for increased access to a range of safe swimming environments
- Acknowledge and recognise the deep connection Aboriginal and Torres Strait Islander peoples have with the land and water when planning and implementing strategies and programs

Workforce

- Strengthen pathways to education, training and employment across the aquatic workforce
- Create a more culturally competent and diverse workforce

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Data quality, understanding risk factors, intervention effectiveness and appropriate evaluation strategies	Alignment of water safety and drowning prevention outcomes to broader policies e.g. Closing the Gap targets	Employment in the aquatic workforce, as well as participation in the development and delivery of programs and services	Drowning risk factors and preventive measures	Participation in swimming and water safety programs, and a reduction in risk-taking behaviour

Targets 2030

Aboriginal and Torres Strait Islander participation in the aquatic workforce is proportional to population

Drowning rate among Aboriginal and Torres Strait Islander peoples reduced by 50%

PRIORITY AREA: POPULATIONS

FOCUS:

Multicultural communities

Why is this an area of focus?

Australia's population is diverse, with Australian Bureau of Statistics (ABS) data showing that 49% of the population were either born overseas or had at least one parent who was born overseas, and 21% speak a language other than English at home (9). This diversity is reflected in drowning statistics, with differences in cultural associations and lower participation in learn to swim and other water safety activities thought to be a factor.

Three main groups are identified in this area: migrants, international students and overseas visitors. Risk factors differ slightly across each group. Adult migrants often have limited experience and understanding of water and water safety in the Australian context. International students are often attracted by Australia's aquatic lifestyle, although many come with limited exposure to water in a recreational context. Overseas visitors can be complacent when holidaying and may increase risk-taking behaviour, including consumption of alcohol and trying unfamiliar activities in unfamiliar environments.

Key data (2009/10 to 2018/19)

725 overseas-born resident* drowning deaths

174 overseas tourist drowning deaths

Average of **73** overseas-born resident deaths per year

Average of **17** overseas tourist deaths per year

1.09/100,000 overseas born residents

2.81/100,000 overseas tourists

Top 3 locations

Overseas-born residents

23% River/creek
22% Beach
15% Rocks

Overseas tourists

25% Beach
21% River/creek
17% Ocean/harbour

Top 3 activities

Overseas-born residents

30% Swimming and recreating
14% Fall
11% Rock fishing

Overseas tourists

42% Swimming and recreating
28% Diving
5% Boating

41% of overseas-born residents were classified as poor swimmers**

39% of overseas tourists were classified as competent swimmers**

Risk factors

- Lack of swimming ability, water safety knowledge and experience
- Low levels of awareness and perception of risk
- Alcohol and drug consumption
- Drowning risk differs across overseas-born residents and tourists
- Low levels of CPR and first aid skills

Example actions

- Delivery of culturally appropriate swimming, water safety, and lifesaving programs that meet the needs of multicultural populations
- Multilingual resources and information in formats most commonly accessed by the specific population
- Cultural competency programs for aquatic industry staff
- Dedicated funding streams
- Community ambassador programs

* International students are included as overseas-born residents given their intent to study and live in Australia for a minimum of 12 months

** Where swimming ability was known. Includes experience of the relevant activity (e.g., experienced scuba diver/surfer)

Key activities 2021-2025

Research

- Investigate risk factors for drowning among people from multicultural communities
- Conduct qualitative studies to inform development of culturally relevant and acceptable advocacy activities and programs
- Evaluate the effectiveness of interventions aimed at multicultural communities
- Improve the collection of relevant drowning data

Policy

- Strengthen policies that aim to increase access and sustainability of targeted programs
- Ensure drowning prevention policies reflect diverse community needs

Advocacy

- Advocate for funding of water safety programs for vulnerable populations
- Promote the importance of swimming and water safety for all ages to multicultural communities
- Engage with ethnic media to increase reach among multicultural communities, including social media

Collaboration

- Establish a National Multicultural Populations Water Safety Reference Group
- Partner with multicultural community groups in policy, research and advocacy efforts
- Partner with tourism and university sectors to prioritise strategies for overseas visitors and international students

Education

- Ensure program and campaign messaging is culturally sensitive and language appropriate
- Develop, implement and evaluate customised programs that are co-designed with and delivered by multicultural community members
- Include cultural brokers in the planning, development and evaluation of swimming and water safety programs

Safe environments

- Ensure water location management plans cater to the needs of diverse populations
- Install appropriate safety signage, noting the importance of visual and multilingual information
- Implement community initiatives that promote safe participation across all aquatic environments

Workforce

- Increase cultural competence of aquatic workforce
- Implement programs to increase the cultural diversity of the aquatic workforce

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Data and research to inform policy and advocacy	Availability of funding for programs for multicultural communities	Programs and campaigns, developed using best practice guidelines based on evidence and evaluation	Water safety and drowning risk among multicultural communities	Positive water safety practices and increased participation in swimming and aquatic activities

Targets 2030

Increased availability of programs that meet the needs of different cultural groups

Drowning rate among people from multicultural backgrounds reduced by 50%

PRIORITY AREA: POPULATIONS

FOCUS:

Regional and remote communities

Why is this an area of focus?

One-third of the Australian population live in regional and remote communities, outside the major cities. Regional and remote communities are diverse and pose unique challenges for drowning prevention. These areas are known to have low levels of population density, which means that lifesaving services are limited, emergency response times are longer, and program availability is lower. This coupled with extensive river systems that flow out into coastal waters provide for a complex range of risks.

Communities in regional and remote areas are often considered to be somewhat disadvantaged due to limited access to services and lower socioeconomic status. Regional and remote children spend more time outdoors but also experience lower developmental outcomes which has been linked to supporting risk reduction. They also have higher levels of alcohol consumption and undertake more activities around water close to home. Water safety strategies, including drowning prevention, designed for major cities are not necessarily relevant for regional and remote communities. Appropriate strategies require community-specific approaches to engage stakeholders.

Key data (2009/10 to 2018/19)

1,717 drowning deaths	**Average of 172** deaths per year	**2.52 deaths/** 100,000 population

Top 3 locations
30% River/creek
17% Beach
17% Ocean/harbour

Top 3 activities
22% Swimming and recreating
15% Fall
14% Boating

81% Inner and outer regional

19% Remote and very remote

Compared with major cities, the drowning rate in **remote areas** is 8 times higher and 13 times higher in very remote areas

Risk factors

- Geographical remoteness
- Increased emergency response times
- Increased exposure to environmental hazards
- Lower socioeconomic status
- Increased accessibility to water bodies on properties
- Limited telecommunication access, facilities and range
- Alcohol consumption
- Limited access to swimming and water programs

Example actions

- Targeted public awareness campaigns focused on specific risks in regional and remote locations
- Workplace Health and Safety legislation
- Delivery of swimming and water safety programs in regional and remote communities
- Community first aid and CPR training

Key activities 2021-2025

Research

- Conduct studies to understand water exposure in regional and remote areas
- Evaluate new and existing interventions (e.g. signage, media campaigns and education programs)
- Work with coroners to increase the number of rural drowning deaths that are investigated

Policy

- Reinforce risk management plans, including alcohol management at recreational locations
- Develop local water safety plans that are embedded into policy and planning
- Strengthen drowning prevention policies for use by local governments, water authorities and National Parks

Advocacy

- Advocate for policies and funding that support sustainability of aquatic infrastructure
- Deliver campaigns targeting risk-taking behaviour in regional and remote waterways
- Promote safe play areas for children on rural properties and agricultural land

Collaboration

- Strengthen partnerships with local Aboriginal and Torres Strait Islander communities, health and education agencies
- Strengthen partnerships with Local Government, and local land and water management agencies
- Promote partnerships to develop and implement local water safety plans

Education

- Expand the delivery of tailored swimming and lifesaving programs
- Disseminate safety, rescue and CPR information through community groups and tourism operators
- Explore and use online and new media to educate local communities

Safe environments

- Conduct risk assessments to identify and mitigate environmental hazards
- Establish the feasibility of public rescue equipment and telecommunication infrastructure
- Improve strategies to reduce driving through flood waters

Workforce

- Ensure access to professional development for aquatic workforce in regional and remote areas
- Provide training for emergency services, land managers and community organisations

Creating medium term changes in

Knowledge	Policy	Practice	Awareness	Behaviour
Understanding risk, exposure and intervention effectiveness	Drowning risk management plans and infrastructure sustainability plans	Access to, and uptake of, education programs and services, including safe play areas on farms	Community understanding of hazards in the local area	Risk-taking behaviour at inland waterways

Targets 2030

Expansion in availability of programs and services in regional and remote areas

Drowning rate in regional and remote locations reduced by 50%

Implementation of the AWSS 2030 relies on the resources and support of many. Monitoring, evaluation and review are essential components and must be resourced appropriately. This resourcing will come from a combination of coordinated AWSC activities, evaluation activities of members and other stakeholders, and commissioned evaluations where resources have been secured.

The AWSC will meet annually to conduct a review of progress. This annual review will draw information from a wide stakeholder group. The diagram below outlines a range of suggested monitoring activities against the key activities, medium and long term targets.

The AWSC intends to commence a mid-point review in 2024 resulting in an updated version of the AWSS 2030 (2.0).

Monitoring, evaluation and review will occur across four key areas.

PARTNERSHIP
Measure stakeholder support, actions and partnerships focused on a Priority Area, an issue or spread broadly across the Strategy.
What are partners doing to support the strategy? What is the evidence that this is having an impact?

Monitored through:

- Annual reviews
- Bi-annual stakeholder consultations

PROGRESS	MEDIUM TERM CHANGES	2030 TARGETS
Monitor the implementation of key activities across all areas of focus and assess the need for adjustments.	**Evaluate progress of medium-term changes across the domains of knowledge, policy, practice, awareness and behaviours.**	**Monitor progress towards AWSS 2030 targets: epidemiologically, step change in stakeholder support and changes in behaviour.**
Are key activities being implemented? What is the evidence that these are having an impact?	What evidence of change and/or impacts exist across knowledge, policy, practice, awareness and behaviours?	Where, how and why is drowning reducing?
Monitored through: • Audit of key activities • Key evaluation projects • Monitor evaluation findings	**Monitored through:** • Systematic reviews • Population surveys • Behavioural studies • Policy analysis • Technical reviews • Knowledge translation	**Monitored through:** • Studies of fatal and non-fatal drowning, as well as other water-related injury and death

METHODOLOGY

The fatal drowning data presented in the Australian Water Safety Strategy 2030 are drawn from the Royal Life Saving Society – Australia National Fatal Drowning Database (the 'database'). The database details information about all unintentional fatal drowning in Australia since 1 July 2002.

Information within the database is primarily sourced via ethical access to the Australian National Coronial Information System (NCIS), with data supplemented through State and Territory Coronial Offices, media reports, police reports, data corroboration with Surf Life Saving Australia and the Queensland Family and Child Commission.

All care is taken to ensure that the information in this report is as accurate as possible. Please note, however, that figures may change depending on the outcomes of ongoing coronial investigations. Data from recent years is more likely to be affected as these investigations may still be ongoing. Data presented in the Australian Water Safety Strategy 2030 are correct as at 16 June 2020, in accordance with Royal Life Saving's ongoing data quality assurance policy. All cases in the database are checked against the NCIS on a regular basis and figures updated in subsequent strategies.

Drowning rates per 100,000 people are calculated using population data from the Australian Bureau of Statistics (ABS) publications:

- Australian Demographic Statistics (Cat 3101.0) (12);
- Regional Population Growth, Australia (Cat 3218.0) (13);
- Estimates and Projections, Aboriginal and Torres Strait Islander Australians (Cat 3238.0) (14);
- Migration, Australia (Cat 3412.0) (2);
- Overseas Arrivals and Departures, Australia (Cat 3401.0) (15).

Percentages and averages are presented as whole numbers and have been rounded up or down accordingly. The data in this document excludes drowning deaths as a result of suicide or homicide, deaths from natural causes, shark and crocodile attacks, or hypothermia.

All information presented is about drowning deaths or deaths where drowning was known to be a factor. Drowning is defined as the process of experiencing respiratory impairment from submersion/immersion in liquid. Drowning has three possible outcomes: death, morbidity and no morbidity (16).

All key drowning facts relate to the time period 2009/10 to 2018/19.

The Beaches, Oceans and Rocks Focus Area includes coastal locations such as foreshore, beach, harbour, coastal waters (oceans) and coastal rocks. Coastal waters are inclusive to 12 nautical miles offshore.

The Rivers and Lakes Focus Area includes inland waterway locations such as rivers, creeks, streams, lakes, dams and lagoons. These may vary in width, depth and water flow, depending on environmental conditions such as drought or flood.

Flood is defined as a general or temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters from the unusual and rapid accumulation or run-off of surface waters from any source (17).

The Aquatic Facilities Focus Area includes public, commercial and communal swimming pools. Private swimming pools are excluded.

Additional key data in the Beaches, Oceans and Rocks Focus Area was obtained from the National Coastal Safety Report 2019 (18). Additional key data in the Aquatic Facilities Focus Area was obtained from the National Aquatic Industry Workforce Profile 2019 (19) and Economic Benefits of Australia's Public Aquatic Facilities (20).

Boating refers to water-based wind- or motor-powered vessels, boats, ships and personal watercraft (e.g., boats, jet skis, sail boats, yachts and catamarans). Watercraft refers to water-based non-powered recreational equipment such as those that are rowed or paddled (e.g., rowboats, surfboards, kayaks, canoes, stand-up paddle boards, boogie boards, windsurfers, and inflatable rafts and boats without motors).

Diving is the activity of exploring or swimming underwater and includes scuba diving, as well as free diving. Snorkelling is the practice of swimming while equipped with gear such as a diving mask, snorkel and fins.

Fishing is the act of catching fish from all environments except those classified as rock fishing. Rock fishing specifically refers to fishing from rocks, rocky outcrops and cliffs.

Additional key data in the Swimming and Water Safety Skills Focus Area was obtained from the Sport Australia AusPlay Swimming State of Play Report (21) and Benchmarking Australian Children's Swimming and Water Safety Skills: Swim School Data (Part 1: Primary School Children Aged 5-12 Years (22).

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APPENDIX ONE: OTHER NATIONAL PLANS AND STRATEGIES

The Australian Water Safety Strategy 2030 provides a framework for reducing drowning in Australia. However, many other National Plans and Strategies also play a role in drowning prevention.

National Plan or Strategy	Link	Area of focus	Intersections with Australian Water Safety Strategy 2030
Australian Disaster Preparedness Framework (23)	https://www.homeaffairs.gov.au/emergency/files/australian-disaster-preparedness-framework.pdf	Disaster preparedness and response	Natural hazards are common in Australia, however, increased frequency and intensity of hazards, as well as increased vulnerability of the population, has significant implications for disaster management and drowning prevention.
National Action Plan for the Health of Children and Young People 2020-2030 (24)	https://www1.health.gov.au/internet/main/publishing.nsf/content/4815673E283EC1B-6CA2584000082EA7D/$-File/FINAL%20National%20Action%20Plan%20for%20the%20Health%20of%20Children%20and%20Young%20People%202020-2030.pdf	Health outcomes among children and young people	A healthy beginning not only impacts the outcomes of an individual but also those of the broader society into the future. In this Plan, a life stages approach acknowledges important milestones and transition points. Drowning risk changes through the lifespan, linked to physical, social and mental development. It is vital that children and young people are given the opportunity to learn swimming and water safety skills.
National Alcohol Strategy 2019-2028 (25)	https://www.health.gov.au/sites/default/files/documents/2020/01/national-alcohol-strategy-2019-2028.pdf	Alcohol-related harm	Alcohol use is a risk factor for drowning. Emerging trends are encouraging, particularly consumption patterns among younger people, however, a deeply ingrained alcohol culture will not change easily. Identified priorities in this Strategy support a multisectoral approach to reducing alcohol-related harm.
National Climate Resilience and Adaption Strategy (26)	https://www.environment.gov.au/system/files/resources/3b44e21e-2a78-4809-87c7-a1386e350c29/files/national-climate-resilience-and-adaptation-strategy.pdf	Climate change adaption and resilience-building	Australia's changing climate is already impacting drowning risk. Projected climate change will exacerbate existing risks, as well as create new risks. Although outside the scope of the Australian Water Safety Strategy 2030, the consequences of climate change will influence drowning rates and impact prevention efforts.
National Disaster Risk Reduction Framework (27)	https://www.homeaffairs.gov.au/emergency/files/national-disaster-risk-reduction-framework.pdf	Disaster risk reduction	The increased frequency and intensity of natural hazards requires an ongoing commitment to disaster resilience and risk reduction. In this Framework, a multisectoral approach recognises the importance of accountability and responsibility. In addition to the impact of disasters on drowning risk, resource availability and capability should be considered.
National Drug Strategy 2017-2026 (28)	https://www.health.gov.au/sites/default/files/national-drug-strategy-2017-2026_1.pdf	Drug-related harm	Drug use is a risk factor for drowning. This Strategy relies on a balanced approach across the three pillars of harm minimisation. Reducing illicit drug use, as well as non-medical use of medications, is a broader societal issue, with the potential for far reaching impacts.

National Falls Prevention for Older People Plan 2004 Onwards (29)	http://www.health.vic.gov.au/archive/archive2014/nphp/publications/sipp/fallplan.pdf	Ageing and falls prevention	Australia's ageing population and limited progress in reducing drowning among older people make falls prevention a shared goal. A range of factors influence the likelihood of a fall, many of which are outside the scope of the Australian Water Safety Strategy 2030. Partnerships with healthy ageing and falls prevention organisations will be of significant benefit.
National Injury Prevention Strategy 2020-2030 (30)	https://consultations.health.gov.au/population-health-and-sport-division/national-injury-prevention-strategy_/user_uploads/national-injury-prevention-strategy-draft-for-consultation-may-2020-1.pdf	All areas of injury prevention	The social determinants of health influence the risk of injury, including drowning. Identified priority populations include Aboriginal and Torres Strait Islander peoples, people living in rural and remote areas and people experiencing socioeconomic disadvantage in this Strategy. Action in the priority areas is supported by a life stages approach, enabling targeted prevention strategies across the lifespan.
National Strategic Framework for Rural and Remote Health (31)	https://www1.health.gov.au/internet/main/publishing.nsf/Content/A76BD33A-5D7A6897CA257F9B-00095DA3/$File/National%20Strategic%20Framework%20for%20Rural%20and%20Remote%20Health.pdf	Health care for regional, rural and remote communities	People in regional and remote areas experience poorer health outcomes than those in major cities. Distance, travel time, lower socioeconomic status, fewer available resources and limited access to services and relevant professionals all contribute. Despite the challenges of service delivery in regional and remote areas, all Australians should be able to access health and education services when they are needed.
The Fifth National Mental Health and Suicide Prevention Plan (32)	http://www.coaghealthcouncil.gov.au/Portals/0/Fifth%20National%20Mental%20Health%20and%20Suicide%20Prevention%20Plan.pdf	Mental health and suicide	Although outside the scope of the Australian Water Safety Strategy 2030, intentional drowning is also a significant issue which should not be overlooked (33). Intentional drowning cannot be addressed without working alongside the mental health sector.
Sport 2030 (34)	https://www.sportaus.gov.au/__data/assets/pdf_file/0005/677894/Sport_2030_-_National_Sport_Plan_-_2018.pdf	Sport, including swimming	Swimming is prioritised as an important life skill in this Plan, not only to prevent drowning but to facilitate a lifelong love of aquatics. The Australian Government committed to working with State and Territory Governments to ensure swimming and water safety education is accessible to primary school children.

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