



# Regional Status Report on Drowning in the **Western Pacific**



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# Foreword

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The Western Pacific Region is a diverse region, with many people, including Mekong communities and Pacific Islanders, living near or along rivers, the sea and other bodies of water. While there's great beauty and benefits to living near water, there are also great risks to the health and safety of those living along the shoreline. From overcrowded boats carrying passengers travelling long distances in hazardous weather conditions, to climate change-related flash flooding impacting families living in homes built on the banks of water channels, or fishing and fisheries striving to provide livelihoods and nutrition for many communities – the risk of drowning presents itself in many different aspects of life for people living in our Region.

Drowning is the third leading cause of unintentional injury deaths in the Western Pacific, after road traffic injuries and falls. In 2019 alone, almost 74 000 deaths in the Region were attributed to drowning. However, the true burden is unknown as reporting does not include climate-related extreme weather events or disasters. Children are some of the most vulnerable. In fact, drowning kills more children in the Western Pacific under the age of 15 than HIV/AIDS, meningitis, malaria, dengue, malnutrition, respiratory disease and hepatitis combined.<sup>1</sup> However, the greatest proportion of drowning deaths (34%) occurs among people aged 65 years and older, with men experiencing a greater burden of drowning than women.

As we move forward in our shared vision for the Western Pacific to become the healthiest and safest region, drowning prevention must not go unrecognized. If we do not make significant transformations now to ensure water safety, in 10 years' time, almost three quarters of a million more people in the Region may drown.

In order to reduce drowning in our Region, we recognize that the risk of drowning cuts across many different sectors: health, transport, maritime safety, tourism, farming and more, with many different partners and stakeholders. To save lives, strong multisectoral collaborations and integrated drowning prevention interventions across broader regional, national and local agendas is required. Through coordination, strong leadership and the implementation of evidence-based, low-cost water safety interventions, we can reduce the burden of drowning in the Region.

As part of the first Resolution on Global Drowning Prevention passed in April 2021 by the United Nations General Assembly, the global community has already taken steps to recognize the immense burden of drowning. Now it's our duty to keep people safe as they

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<sup>1</sup> Global health estimates: leading causes of death. In: Global Health Observatory [website] (<https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghle-leading-causes-of-death>, accessed 1 May 2021).



interact with water throughout their daily lives, jobs and recreational activities.

We are pleased to present the first regional assessment of drowning prevention and water safety in the Western Pacific Region. This report is a significant step forward to accelerating advocacy and action to minimize and avoid these preventable deaths. This important work builds upon the global strategies to end drowning, outlined in the *Global Report on Drowning: Preventing a Leading Killer* (2014). It showcases examples of leadership, innovation and strong partnerships within and beyond the health sector, and celebrates the progress Member States have made across the Region. My sincere thanks to all those Member States who participated in the preparation of this report.

*Takeshi Kasai*

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Regional Director for the Western Pacific



# Acknowledgements

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Strategic direction on the report was provided by David Meddings, Thaksaphon Thamarangsi and Patanjali Nayar, with project inception driven by Jonathon Passmore. Coordination of data collection, data verification and analysis, and oversight of report development at the regional level was led by Caroline Lukaszuk (WHO Regional Office for the Western Pacific) and Rania Abdelhamid (WHO Regional Office for South-East Asia). WHO also wishes to thank the following contributors whose expertise made this document possible: Gemma May, Kate Eardley, Tom Mecrow, Kira Fortune and Amy Bestman.

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Finally, WHO wishes to thank the Royal National Lifeboat Institution for its generous financial support in the development and publication of this report.



# Abbreviations

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<b>AED</b>	automatic external defibrillator
<b>AWSC</b>	Australian Water Safety Council
<b>AWSS</b>	Australian Water Safety Strategy
<b>BAC</b>	blood alcohol concentration
<b>CPR</b>	cardiopulmonary resuscitation
<b>GHE</b>	Global Health Estimates
<b>ICD</b>	International Statistical Classification of Diseases and Related Health Problems
<b>JLA</b>	Japan Life-saving Association
<b>NGO</b>	nongovernmental organization
<b>NMSA</b>	National Maritime Safety Authority (Papua New Guinea)
<b>SOLAS</b>	International Convention for the Safety of Life at Sea
<b>SDG</b>	Sustainable Development Goal
<b>WHO</b>	World Health Organization

# Executive summary

## Key messages:

- In 2019, drowning was responsible for 74 075 deaths in the Western Pacific Region. This is the highest number of deaths from across all regions of the World Health Organization (WHO). Over 20% of these deaths occurred among children under the age of 15 years. Drowning rates in the Region's lower-middle-income countries and areas were nearly four times higher than those of the high-income countries and areas.
- Since the launch of the WHO *Global Report on Drowning: Preventing a leading killer* in 2014 and the follow-up resource *Preventing Drowning: An implementation guide* in 2017, the Organization has been working to scale up advocacy and action for the prevention of drowning in the Western Pacific Region.
- This report presents the findings of the first assessment of drowning prevention in the Western Pacific Region. Twenty countries and areas took part, shared their knowledge and experience, and made their first collective step to address drowning in the Region.

## Burden of drowning in the Western Pacific Region

The Western Pacific Region is home to approximately a quarter of the world's population. However, in 2019, the Region accounted for one third of the world's 235 000 drowning deaths. The Region is vast, spanning 37 countries and areas, and encompassing a wide range of social and economic settings. As a result, exposure to and interaction with water varies across the Region, giving rise to different drowning-related risk factors. This introduces a wide range of challenges – but also opportunities – for improving water safety in different parts of the Region.

## Drowning is preventable

Drowning can be prevented through the implementation of evidence-based, cost-effective approaches. The *WHO Global*

*Report on Drowning* outlines four strategies and six interventions for drowning prevention. Strategies focus on ensuring strong national mechanisms are in place for a coordinated and effective approach to addressing drowning, while interventions promote community action. A comprehensive response to drowning requires a multisectoral approach that champions health beyond the health sector and draws on the knowledge, reach and capacity of other agencies and organizations. Effective strategies and interventions must respond to local needs, consider available resources and build on progress made to date. In line with the regional WHO vision to make the Western Pacific the healthiest and safest region, drowning prevention efforts must be underpinned by a gender, equity and human rights lens. It is critical that programmes and interventions do not increase health inequities.

## Drowning prevention in the Western Pacific: progress to date

Understanding the scope of existing drowning prevention activities and identifying key sectors and stakeholders to engage in this work are critical for sustainable, coordinated action.

Data collected through this report highlight:

- There is a wide range of activities currently being conducted to prevent drowning in the Region. These efforts cut across multiple sectors – health, transport, maritime safety, tourism, disaster preparedness, among others – and are delivered through government and nongovernmental organizations. Some entities may not identify their key tasks as focused on preventing drowning, and therefore they may not view themselves as drowning prevention actors.
- There is a need to strengthen coordination between drowning prevention activities to better mobilize resources and continue to build on the strengths of each actor.
- There is a need to improve monitoring and evaluation systems to ensure a complete picture is available on who is drowning, under what circumstances, what initiatives are available to prevent drowning, and what the evidence shows about whether or not these are successful.

## Recommendations to further reduce drowning in the Western Pacific Region

This report provides a regional assessment of drowning prevention that corresponds to, and follows on from, the *2014 Global Report* and the 2017 follow-up *Implementation Guide*. The findings



and recommendations in this report can be used to accelerate action to reduce drowning in the Western Pacific Region.

This report sets out seven key recommendations, which correspond to its key findings:

1. Designate a national lead agency, or support establishment of a multisector coordination body, to drive coordinated drowning prevention efforts.
2. Develop and implement a national water safety plan that contains measurable indicators for drowning prevention.
3. Formalize multisectoral mechanisms to address drowning prevention and water safety by establishing partnerships across sectors and assigning clear roles and responsibilities.
4. Document and share knowledge gained in drowning prevention efforts, nationally and regionally.
5. Perform a comprehensive review of drowning prevention legislation to ensure best practice laws are developed, where absent, and that appropriate resources for implementation and enforcement are available.
6. Evaluate drowning prevention intervention plans and programmes from the outset, ensuring evaluation is adequately planned for and funded.
7. Strengthen data systems that capture drowning incidents, while improving the availability and quality of reporting.

It is critical to share success stories and learning among stakeholders and identify opportunities for scale up both within countries and areas and across the Region.









## Definition of drowning

Drowning is “the process of experiencing respiratory impairment from submersion/immersion in liquid”.<sup>1</sup> Drowning can either be **fatal** or **non-fatal**. Non-fatal drowning events can cause severe brain damage that may result in long-term disabilities such as memory problems, learning disabilities and permanent loss of basic functioning.

<sup>1</sup> Non-fatal drowning categorization [position statement]. 8-9 August 2018. In: World Health Organization [website] (<https://www.who.int/docs/default-source/documents/drowning/non-fatal-drowning-categorization.pdf>, accessed 19 July 2021).

# Introduction

Drowning ranks as the third leading cause of unintentional injury deaths in the World Health Organization (WHO) Western Pacific Region, after road traffic injuries and falls. In 2019 alone, 74 075 deaths in the Region were attributed to drowning.<sup>2</sup> However, it is important to acknowledge that these statistics are likely to be an underestimation of the true burden and impact for many reasons, including that WHO global estimates for drowning do not include deaths from climate-related extreme weather events or disasters. This under-representation could be as much as 50% in countries where extreme weather events and incidents are common<sup>3</sup> – many of which are in the Western Pacific Region.

The 2014 WHO *Global Report on Drowning: Preventing a leading killer* outlines four strategies and six interventions for drowning prevention (Fig. 1).

At the national level, WHO recommends each country **develop and implement a national water safety plan**, which sets out the main principles, goals, objectives, actions and coordination mechanisms for reducing drowning. A comprehensive response to drowning requires **formalized multisectoral coordination mechanisms**

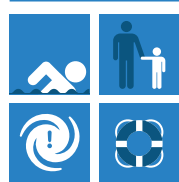
to identify and align efforts that work to prevent drowning deaths, establish partnerships across sectors, and assign clear roles and responsibilities. Strong **data collection systems and quality reporting mechanisms** are critical for understanding risk factors for drowning and assessing the effectiveness of interventions. **Strategic communications** should be used to strengthen public awareness of drowning and to support the uptake and success of prevention measures.

<sup>2</sup> Global health estimates: leading causes of death. In: Global Health Observatory [website] (<https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death>, accessed 1 May 2021).

<sup>3</sup> Global report on drowning: preventing a leading killer. Geneva: World Health Organization; 2014 ([https://www.who.int/water\\_sanitation\\_health/diseases-risks/global-report-on-drowning/en/](https://www.who.int/water_sanitation_health/diseases-risks/global-report-on-drowning/en/), accessed 1 May 2021).

**FIG. 1.** Four strategies and six interventions for drowning prevention

## Strategies



Develop a national water safety plan



Advance drowning prevention through data collection and well-designed studies



Promote multisectoral collaboration



Strengthen public awareness of drowning through strategic communications

## Interventions



Provide safe places (for example, a day-care centre) away from water for preschool children, with capable childcare



Train bystanders in safe rescue and resuscitation



Install barriers controlling access to water



Build resilience and manage flood risks and other hazards locally and nationally



Teach school-age children swimming and water safety skills



Set and enforce safe boating, shipping and ferry regulations

Source: Global report on drowning: preventing a leading killer

At the community level, it is important to ensure **young children are appropriately supervised** around water. **Installing barriers** can control children's access to water in cases of absent or inadequate supervision. Teaching children aged over 6 years **swimming and water safety skills** is particularly relevant for school settings, while **training in safe rescue and**

**resuscitation** is applicable to the broader population. Working with communities to strengthen **resilience to floods and other hazards** is necessary, particularly with world flood risk expected to rise over time.<sup>4</sup> Approaches to making travel over water safer include setting and enforcing **boating, shipping and ferry regulations**.

<sup>4</sup> Ibid.



**Drowning fits closely with existing international frameworks and global agendas**, including the Sustainable Development Goals (SDGs) and other international development agendas, such as those to reduce the impact of climate change and to reduce social and economic inequities (Box 1).

## How this report was produced

This is the first regional assessment on drowning prevention in the Western Pacific Region. As such, it represents an important

first step towards understanding the burden and impact of drowning, progress made towards its prevention in our Region, and opportunities for sharing knowledge to inform further action to reduce drowning rates in the Western Pacific.

This report was developed through a national consultation process with countries and areas in WHO's Western Pacific Region. A parallel effort following similar processes and modalities also occurred in the WHO South-East Asia Region (Fig. 2), and findings are available in a sister report.

### BOX 1. Drowning prevention: a contributor towards global commitments

Drowning prevention has the ability to contribute to and advance progress towards several global commitments and agendas, including the 2030 United Nations SDGs, United Nations Framework Convention on Climate Change (community resilience to climate change), the Sendai Framework for Disaster Risk Reduction and universal health coverage.

When considering the SDGs, drowning prevention interventions have the potential to

contribute towards Goals 1, 3, 4, 5, 6, 8, 10, 11 and 13. Drowning prevention efforts can support progress on early childhood targets linked to mortality, education, immunization and nutrition, and have the potential to be an innovative child survival intervention, protecting investment in child and adolescent development. This is particularly important in countries where drowning is a leading cause of child death.





Participation in this process by countries and areas was voluntary, and followed a similar methodology to previous WHO global status reports (for example, the *Global Status Report on Road Safety 2018*). In the Western Pacific region, 20 of 37 countries and areas participated (71%), representing 99% of the Region's population: Australia, Cambodia, China, Cook Islands, Hong Kong SAR (China), Japan, the Lao People's Democratic Republic, Macao SAR (China), Malaysia, the Marshall Islands, Mongolia, New Zealand, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Tonga, Vanuatu and Viet Nam.

In 2018, a questionnaire was developed to gain an understanding from each of the

participating countries and areas on their situation in terms of:

- the scale of the drowning burden;
- the development and status of action plans, laws and policies that respond to drowning prevention challenges;
- the status of existing national, multisectoral collaborations to address drowning;
- the availability of drowning data and reporting mechanisms;
- the availability of drowning prevention interventions at the community level; and
- any technical assistance required to address shortcomings.

National reporting took place over a period of approximately 15 months, from January 2019 to March 2020. Final responses were validated and officially cleared by the relevant government ministry of the respective Member State.

## Aim of this report

This report outlines current drowning prevention efforts across the Western Pacific Region, reporting progress against the 10 key actions for reducing drowning as set out in the WHO *Global Report on Drowning* (2014), and the subsequent *Preventing Drowning: An implementation guide* (2017) (Fig. 1). The findings and recommendations in this report can be used to accelerate action to reduce drowning in the Region.

## Who this report is for

This report is aimed at all agencies and individuals concerned with drowning prevention. The intended audience ranges from national policy-makers to service providers, programme implementers, nongovernmental organizations (NGOs), researchers, and international and regional institutions.

## What this report contains

**Section 1** sets out what is known about the Region's drowning burden and provides a snapshot of who is at risk and where.

**Section 2** presents findings from the consultation and survey carried out in 2019–2020, focusing primarily on the four key strategies and six key interventions

**FIG. 2.** Process of data collection for the *Regional Status Report on Drowning*



for drowning prevention set out in the Global Report (Fig. 1).

The report concludes by identifying some of the challenges and opportunities involved in addressing drowning in the Western Pacific Region.

Throughout the report, case studies illustrating drowning prevention interventions in a range of regional settings are provided to show the diversity of efforts under way. These case studies aim to inspire and encourage countries embarking on action for drowning prevention, highlighting what is possible with available resources and capacity while promoting

knowledge exchange and learning across the Region.

This report also provides a baseline against which governments can monitor progress towards their drowning prevention goals, and acts as a call to greater action to address avoidable mortality and morbidity caused by drowning in the Region. A companion report has been developed for the WHO Regional Office for South-East Asia using the same framework approach, presenting information for Bangladesh, Bhutan, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor-Leste.







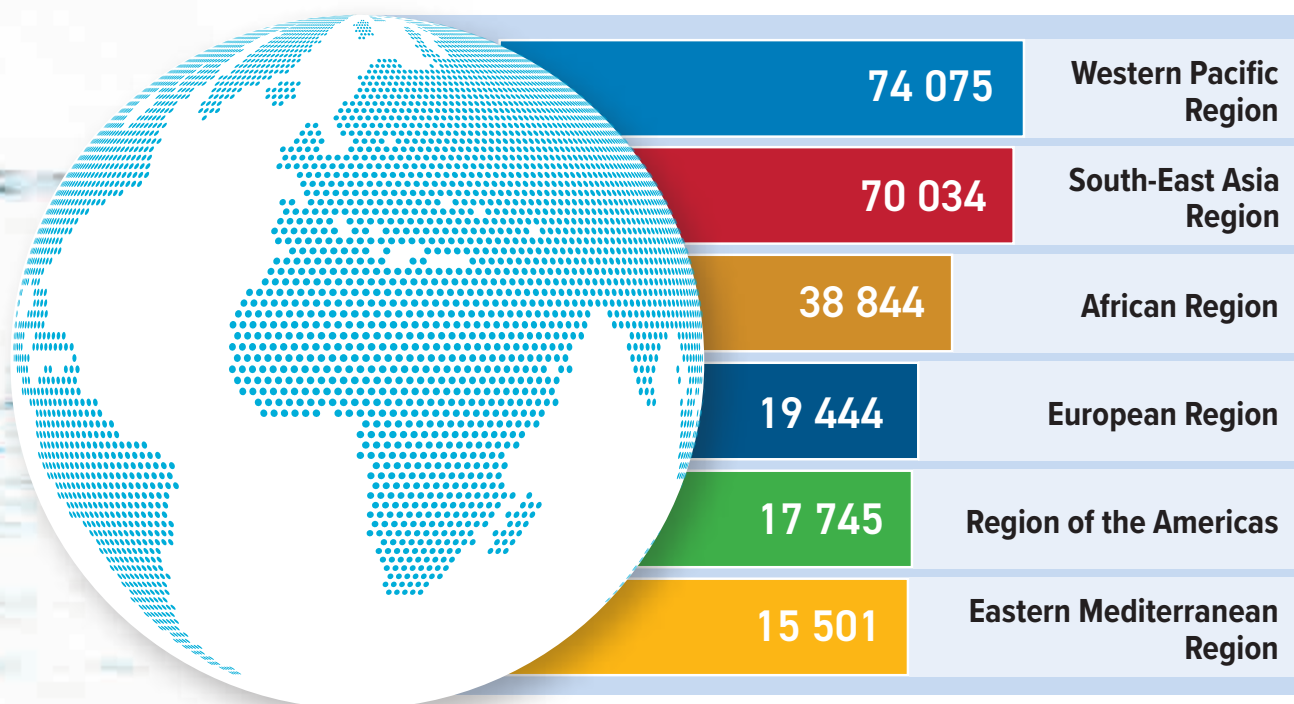


# Magnitude and impact

## Where is the greatest risk?

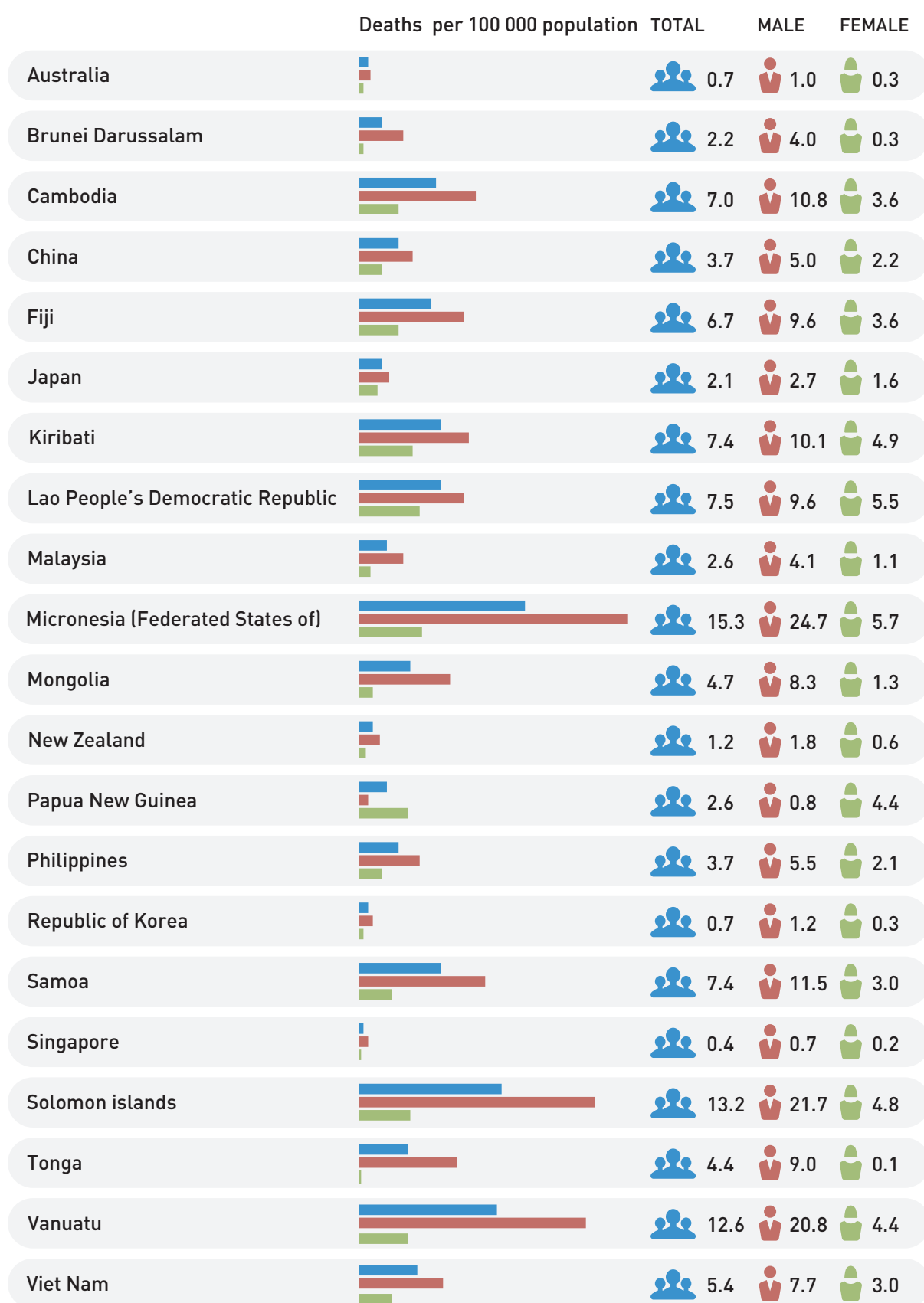
Over 74 000 people drowned in the WHO Western Pacific Region during 2019, corresponding to the largest number of drowning deaths across all WHO regions (Fig. 3).

**FIG. 3.** Number of drowning deaths by WHO region, 2019



Source: Global Health Estimates (GHE) data, 2019

There are large disparities in drowning rates across the countries and areas of the Western Pacific Region. The Federated States of Micronesia has the highest drowning death rate at 15.3 per 100 000 population, followed by Solomon Islands at 13.2, Vanuatu at 12.6 and the Lao People's Democratic Republic at 7.5. By marked contrast, drowning death rates in Australia stand at 0.7 per 100 000 population and New Zealand at 1.2 (Fig. 4).

**FIG. 4.** Drowning death rates in the Western Pacific Region, by sex, 2019

Source: Global Health Estimates (GHE) data, 2019



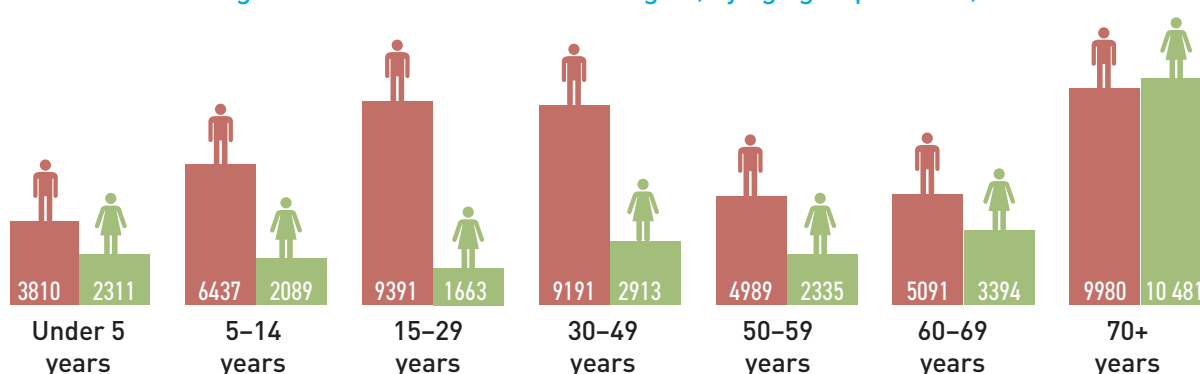
## Who is most at risk?

Over 20% of drowning deaths in the Western Pacific Region occur among children aged below 15 years (Fig. 5). Drowning kills more children under the age of 15 in the Region than HIV/AIDS, meningitis, malaria, dengue, malnutrition, respiratory disease and hepatitis combined.<sup>1</sup> However, the greatest proportion of drowning deaths (34%) occurs among people aged 65 years and above (Fig. 5). Males experience a greater burden

of drowning when compared to women – in 2019, 66% of drowning deaths in the Region occurred among males.

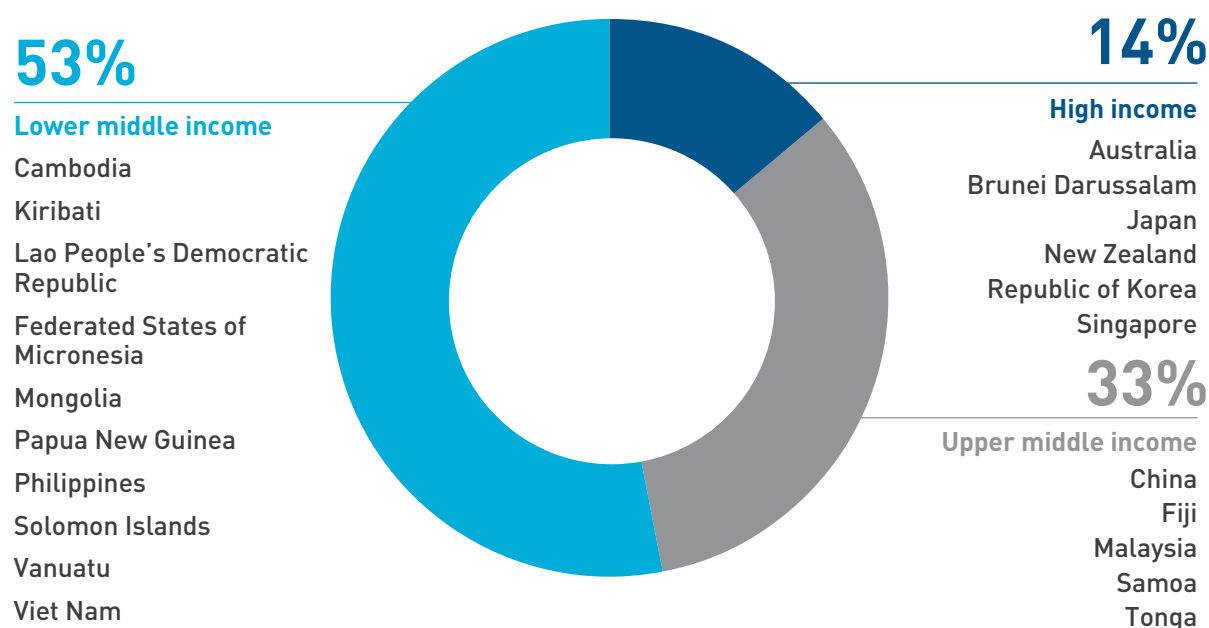
Drowning often affects low-socioeconomic communities who have the least resources to safely adapt to the risks around them.<sup>2</sup> Drowning rates are also disproportionately high among minority populations in places where overall drowning rates are low.<sup>2</sup> Drowning rates in the Region's lower-middle-income countries are nearly four times higher than those of its high-income countries (Fig. 6).

**FIG. 5.** Drowning deaths in the Western Pacific Region, by age group and sex, 2019



Source: Global Health Estimates (GHE) data, 2019

**FIG. 6.** Proportion of drowning deaths in the Western Pacific Region, by country income level, 2019







Note: Countries were categorized using the World Bank country classifications by income level matrix 2020–2021.

Source: Global Health Estimates (GHE) data, 2019

## What are the risks?

There is a range of circumstances that increase the risk of drowning (Fig. 7).<sup>5</sup> Risk varies between settings and population groups across the Region.

**FIG. 7.** Circumstances that can increase drowning risk

<p><b>Travelling on water</b></p> 	<p>Boats carrying passengers travelling long distances while overcrowded, in hazardous weather conditions and with little or no safety equipment are circumstances associated with increased drowning risk. Additionally, boats operated by individuals who have not received appropriate safety training and boats that may not have undergone regular safety checks increase drowning risk.<sup>a</sup></p>
<p><b>Flooding disasters</b></p> 	<p>Extreme weather events such as cyclones, typhoons and tsunamis are occurring more frequently and with greater intensity due to climate change.<sup>b</sup> In extreme instances, flash flooding may impact communities and lead to immediate loss of life. In other instances, floodwaters may remain in communities for weeks or months after the initial event and be associated with increased drowning events.<sup>c</sup></p>
<p><b>Recreation around water</b></p> 	<p>Drownings happen all year round, but they peak during warmer seasons when individuals are more likely to engage in recreational water activities.<sup>d</sup></p> <p>Unfenced swimming pools, together with a lack of adult supervision in private settings or without the presence of trained lifeguards in public settings, increase the risk of drowning among children.<sup>a</sup> Additionally, tourists are at increased risk of drowning as not all travellers have adequate water safety skills and not all tour providers are trained to ensure their clients' safety while swimming, kayaking, snorkelling or diving.<sup>e</sup> Participating in water-based activities in unfamiliar environments can expose people to unknown dangers, particularly if signage or other forms of public information are not displayed to warn of potential risk or recommend minimum required water safety skills.</p>
<p><b>Bathing</b></p> 	<p>Both private and public places of bathing increase the risk of drowning, particularly among unsupervised young children and older people.<sup>f</sup></p>

<sup>5</sup> Preventing drowning: an implementation guide. Geneva: World Health Organization; 2017 (<https://www.who.int/publications-detail-redirect/preventing-drowning-an-implementation-guide>, accessed 1 May 2021).

<p><b>Living near water</b></p> 	<p>Living in close proximity to water increases drowning risk,<sup>e</sup> particularly for young, unsupervised children. For example, houses built on the banks of water channels or on stilts, floating houses and houseboats are common in many countries in the Region (such as along the Mekong Delta). Rivers that burst their banks following severe rain cause flooding and increase drowning risk for those who live close by.<sup>g</sup></p>
<p><b>Working on or around water</b></p> 	<p>Fishing and fisheries provide livelihoods and nutrition for many communities in the Region.<sup>e</sup> Risk of drowning while fishing increases during hazardous weather, at night-time when there is low visibility, and when safety equipment is not available.</p>
<p><b>Collecting and storing water</b></p> 	<p>Lack of access to safe, reliable and affordable supplies of clean water means that rainwater is often stored in large containers in households. Unsupervised children may fall into and drown in water storage or collection vessels, or other access points such as wells, when uncovered.<sup>a</sup></p>
<p><b>Alcohol consumption</b></p> 	<p>Alcohol use may cause an individual to fall into water or affect their ability to operate a boat safely. Alcohol can increase risk-taking behaviour while inhibiting an individual's ability to swim, reducing the chance of survival in water.<sup>e,f</sup></p>

<sup>a</sup> Jagnoor J, Lukaszyk C, Baset K, Ivers R, Easmin S, Rahman A. Context of water transport related drownings in Bangladesh: a qualitative study. BMC Public Health. 2019;19(1):1567.

<sup>b</sup> Water and disasters. In: UN Waters [website] (<https://www.unwater.org/water-facts/disasters/>, accessed 1 May 2021).

<sup>c</sup> Drowning [fact sheet]. 27 April 2021. In: World Health Organization [website] (<https://www.who.int/news-room/fact-sheets/detail/drowning>, accessed 1 May 2021).

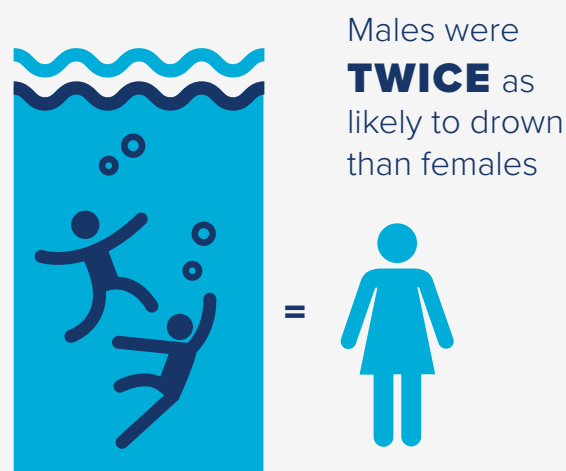
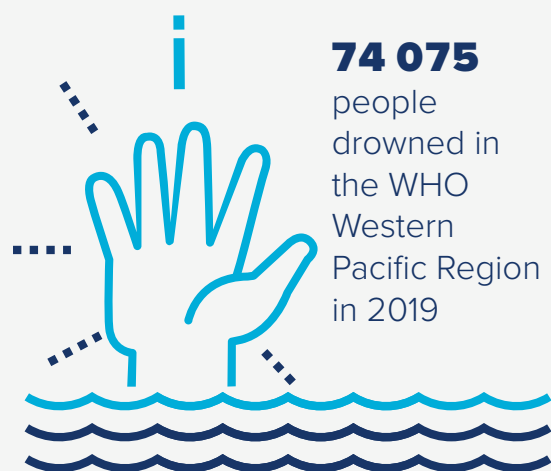
<sup>d</sup> Drowning facts and figures. In: International Life Saving Federation [website] (<https://www.ilsf.org/drowning-facts-and-figures/>, accessed 1 May 2021).

<sup>e</sup> Preventing drowning: an implementation guide. Geneva: World Health Organization; 2017 (<https://www.who.int/publications-detail-redirect/preventing-drowning-an-implementation-guide>, accessed 1 May 2021).

<sup>f</sup> Lin CY, Wang YF, Lu TH, Kawach I. Unintentional drowning mortality, by age and body of water: an analysis of 60 countries. Inj Prev. 2015;21(e1):e43–50.

<sup>g</sup> Floods. In: World Health Organization [website] ([https://www.who.int/health-topics/floods#tab=tab\\_1](https://www.who.int/health-topics/floods#tab=tab_1), accessed 1 May 2021).

## DROWNING IN THE WESTERN PACIFIC REGION – KEY FACTS 2019



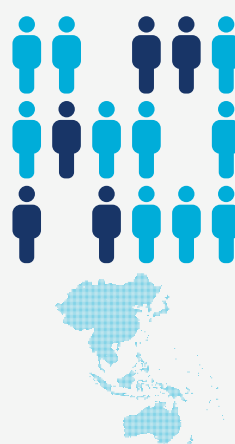
**20%** of  
drowning  
deaths  
occurred  
among  
children aged  
**LESS  
THAN 15  
YEARS**



**34%** of  
drowning  
deaths  
occurred  
among people  
aged **65  
YEARS  
AND  
ABOVE**



The rate of  
drowning was  
approximately  
**FOUR  
TIMES  
HIGHER**  
in lower-middle-  
income  
countries than  
in higher-  
income  
countries



Drowning  
death rates  
across the  
Region ranged  
from **0.7 TO  
15.3 PER  
100 000**  
population

Source: Global health estimates: leading causes of death. In: Global Health Observatory [website] (<https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death>, accessed 1 May 2021).











# Drowning prevention in the Western Pacific Region: progress to date

## Strategies to support drowning prevention interventions

### 1. Develop a national water safety plan

Of the 20 countries and areas in the Western Pacific Region participating in this report, eight (40%) reported having either national or subnational strategies, policies or plans that aim to reduce drowning.<sup>6</sup>

Of these eight, Australia, Malaysia, New Zealand and the Philippines have national, stand-alone drowning prevention strategies. All four strategies highlight context-specific risk factors for drowning and three set out measurable, time-bound indicators for reducing drowning deaths (Fig. 8). All acknowledge the importance of multisectoral collaboration and identify leadership and coordination frameworks to increase the effectiveness of the strategies. Viet Nam reported having subnational drowning prevention strategies that are specific to different sectors.

Aligning and integrating drowning prevention with broader agendas can increase opportunities for establishing longer-term and broader-reaching water safety strategies.<sup>6</sup> China, Hong Kong SAR (China), Mongolia and Viet Nam reported that they have included drowning prevention as a component of broader injury prevention, health or development strategies.

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<sup>6</sup> A national water safety (or drowning prevention) plan sets out the main principles, goals, objectives, actions and coordination mechanisms for reducing and preventing fatal and non-fatal drowning. This is an essential tool to ensure a comprehensive and timely approach to addressing drowning which identifies and involves all required actors.

**FIG. 8.** Strategies, policies or plans that include drowning prevention in the Western Pacific Region**STAND-ALONE NATIONAL STRATEGIES, POLICIES OR PLANS SPECIFIC TO DROWNING PREVENTION****Australia**

Australia has subnational strategies relevant to drowning prevention developed by its states and territories, guided by the **National Australian Water Safety Strategy 2030**, which has the goal of reducing drowning by 50% by 2030.

**Malaysia**

The **National Water Safety Strategy** developed by the **Water Activity Safety Council** aims to:

- Increase awareness towards addressing drowning incidents at home, in the workplace, during recreation and transportation.
- Cultivate a safety culture among the public during water-based activities, water sports and recreation.
- Promote designs embedding safety elements for water sports activity and water-related activities.
- Coordinate data collection among various agencies on drowning incidents.

**New Zealand**

The **New Zealand Water Safety Sector Strategy 2025** aims to:

- Reduce per-capita preventable drowning deaths using a five-year rolling average of 25% by 2025. Per-capita fatalities are targeted to move from 1.59 to 1.19 by 2025.
- Reduce per-capita preventable drowning-related hospitalizations using a five-year rolling average of 12% by 2025. Per-capita hospitalizations are targeted to move from 3.7 to 3.25 by 2025.
- Year-on-year increase in people participating in and competencies achieved in water safety education programmes, as evidenced by:
  - 50% increase in students participating in pool-based “Water Skills For Life” programmes.
  - 10% increase in the “Water Skills For Life” achievements of the two fundamental water survival skills.
- At least 75% of the water safety sector’s actions in the Water Safety Strategy’s implementation plan are delivered by the end of 2025.

**Philippines**

The **Philippines Multisectoral Action Plan on Drowning Prevention** aims to reduce drowning mortality by 50% by the year 2026.



## NATIONAL INJURY PREVENTION STRATEGIES THAT INCLUDE DROWNING PREVENTION



### Viet Nam

The **Program on Child Injury Prevention and Control** for the period of 2021–2030 aims to reduce drowning mortality among children by 10% between 2020 to 2025.



### Hong Kong SAR (China)

The **Action Plan to Strengthen Prevention of Unintentional Injuries in Hong Kong** includes actions specific to drowning prevention, such as the review of drowning cases kept by the Coroner's Court to inform the development of drowning prevention messaging.

## OTHER NATIONAL STRATEGIES THAT INCLUDE DROWNING PREVENTION



### China

China includes drowning prevention in multiple national health strategies, including:

- **Healthy China 2030**
- **Opinions of the State Council on Implementing Healthy China Action**
- **National Program of Action for Children Development in China (2011–2020)**



### Mongolia

Mongolia includes drowning prevention in an **Order of the Minister for Education, Culture, Sciences and Sports**. This order approves a training programme for safe living skills for preschool children, schoolchildren and the general population, with a specific goal of drowning prevention. The order was issued as part of the National Program on Injury Prevention 2018–2022.

Of the countries and areas that did not have any type of water safety strategies, six (50%) were currently preparing or expressed their interest in developing a national strategy or policy relevant to

drowning prevention. NGOs and ministries of health, transport and maritime safety/ maritime administration were reported to have an interest in this work.

## 2. Promote multisectoral collaboration

A range of actors was reported to be involved in drowning prevention and water safety across the Region. The most common sectors, agencies and organizations involved include

ministries of health, police, transport, education and maritime safety; disaster risk reduction bodies; and meteorology departments (Fig. 9).

**FIG. 9.** Number of countries and areas of the Western Pacific Region reporting involvement of specific sectors and actors in drowning prevention



Through the process of collecting data for this report, a number of diverse activities were found that contribute to drowning prevention. Examples include:

- basic life support and cardiopulmonary resuscitation training provided to schools through outreach programmes by the Red Cross in Palau;
- patrols by the Ports Authority in the Marshall Islands to ensure alcohol is not consumed in the port area prior to boarding boats;



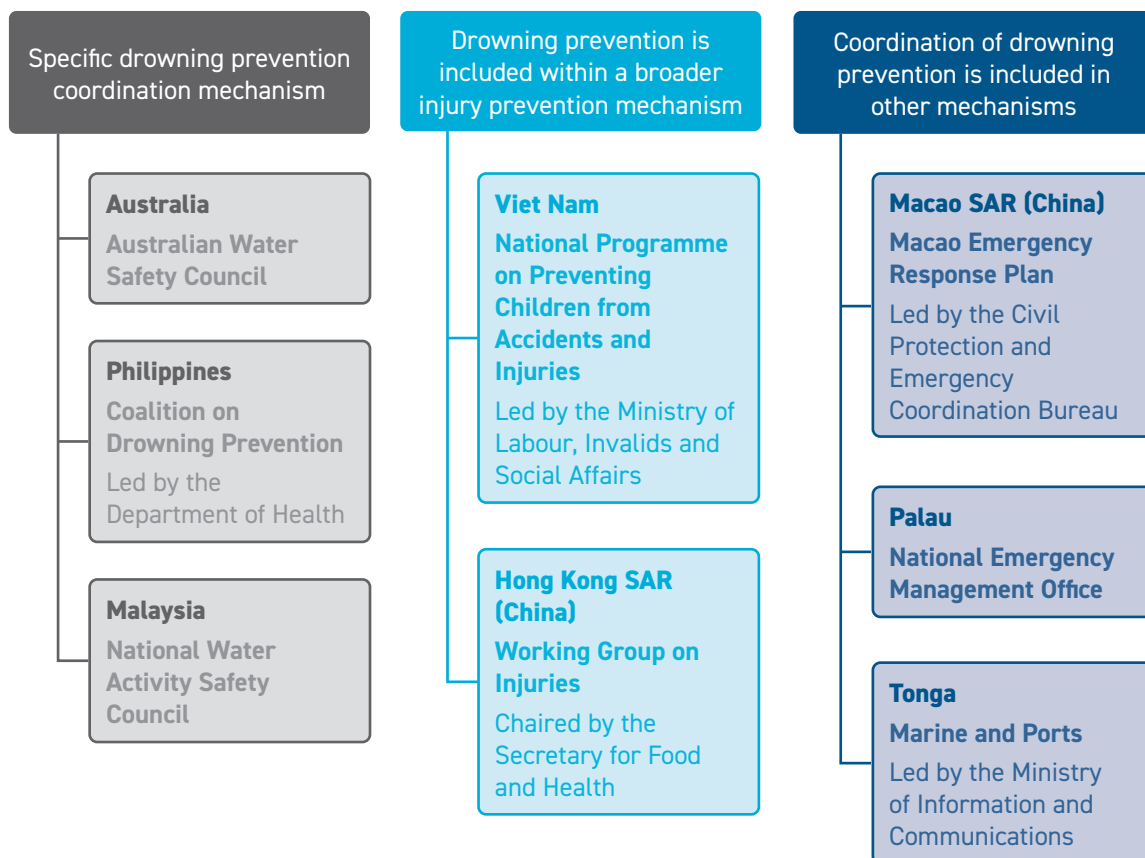


- simulation exercises run by the Tonga Bureau of Meteorology to help prepare communities for flooding events; and
- free community-based day care for children up to 6 years of age provided by the Philippine Department of Social Welfare and Development.

Countries and areas used a range of mechanisms to coordinate drowning

prevention efforts. Eight countries and areas (40% of respondents) reported having a formal mechanism for whole-of-government coordination of drowning prevention efforts.<sup>7</sup> Types of coordination mechanisms ranged from those specific to drowning prevention to those that are part of broader injury prevention efforts; and from those that exist within emergency response mechanisms to those that are part of maritime safety mechanisms (Fig. 10).

**FIG. 10.** Coordination mechanisms for drowning prevention in the Western Pacific Region

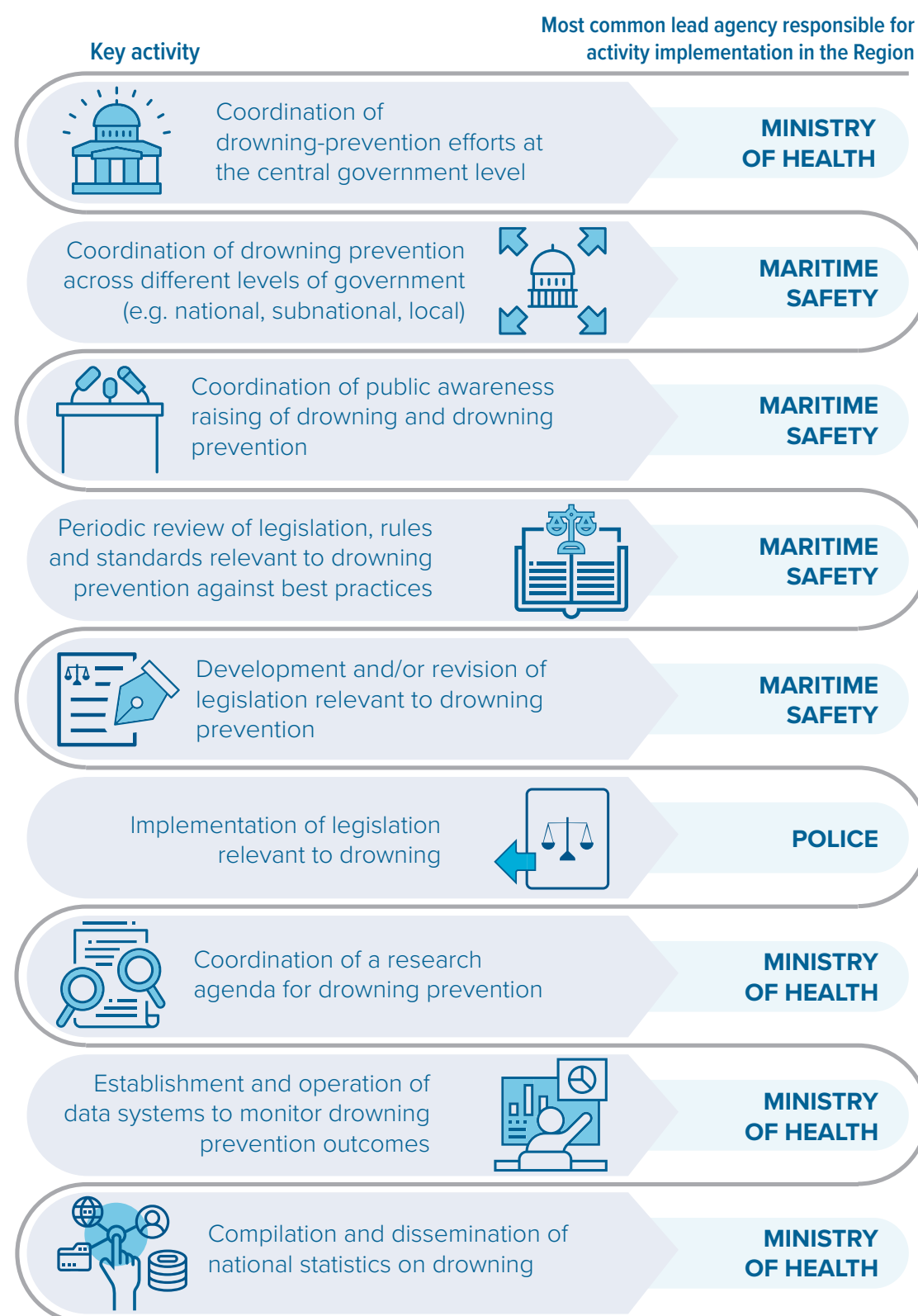


<sup>7</sup> Whole-of-government coordination refers to the inclusion of all necessary sectors for action in one coordinated strategy. This is important for establishing leadership, ensuring accountability, leveraging various resources and networks, accessing various expertise, identifying existing systemic gaps, and building a strong, cohesive, well-supported movement to address the issue.

Nine key activities were identified that contribute to an effective national multisectoral response to drowning prevention (Fig. 11). Agencies leading

implementation of these functions varied between countries but were most commonly ministries of health and maritime safety.

**FIG. 11.** Key activities and lead agencies for drowning prevention



## CASE STUDY 1. Australia: Encouraging a collaborative approach through the Australian Water Safety Council's National Water Safety Plan

Coordination, collaboration and bringing people together to gain and evaluate information on drowning prevention is the focus of the Australian Water Safety Council (AWSC) and its highly regarded Australian Water Safety Strategy (AWSS).

The AWSC enables national organizations to work together to make drowning prevention a priority and reduce drowning, and acts as a consultative forum to encourage collaboration. In addition, it develops and monitors the AWSS and facilitates workshops to create action plans on key drowning prevention issues.

The AWSS, now in its sixth edition, combines information from the best available research with comprehensive stakeholder engagement to create a framework of issues and actions for water safety planning in Australia.

"It's about joining the dots," explains Justin Scarr of the AWSC. "We connect to other government and organizational agendas on drowning and drowning prevention, have discussions and bring people along for the journey, hopefully connecting them through the plan."

The AWSS 2030 identifies key drowning prevention issues across five domains – people, places, activities, specific populations and risk factors. The latter targets risk-taking behaviours, use of alcohol and drugs, and a lack of swimming skills. In recent years, the AWSC has conducted workshops on



the impacts of non-fatal drowning, drowning risk among culturally diverse populations, and addressed gaps in access to swimming and water safety education. These workshops engaged stakeholders and sectors from across the country, who could contribute resources, data or expertise to solve drowning prevention problems.

According to Mr Scarr, the Australian model is a good example for other nations to follow when making a start on establishing a drowning prevention policy, especially when nations cannot rely on a centralized government approach. This is because the AWSC works independently and collaboratively across the various tiers of national government, educating stakeholders about drowning issues, and connecting them to opportunities to reduce drowning.

## CASE STUDY 2. Philippines: The power of multisectoral partnerships

In 2018, the first Regional Rescue Olympics was held in the Western Visayas, Philippines. The event effectively demonstrated how dynamic multisectoral drowning prevention partnerships can maximize resources, share technical expertise and knowledge, and showcase individual and collective talents and skills.

Held in Dumangas, Iloilo, Philippines, and organized by the national Department of Health Western Visayas, the Regional Rescue Olympics attracted 470 participants from different government agencies around the region, including the Coast Guard, fire service and military.

The Water Search and Rescue category included underwater knot tying, lifeguard rescue of a passive victim, group rescue of a passive victim with a spine injury, rowboat rescue of a non-responsive victim, and basic life support.

Dr May Ann Soliva-Sta. Lucia from the Philippine Department of Health, who organized the event, said: “It is highly important to work together in multisectoral partnerships, because multiple resources are being maximized and shared – not only the assets of the agencies, but most of all, the human resources. During drowning incidents and disasters, human resources are the most important resources that we have.”







“Moreover, during an event like this, the agencies learn from one another,” she added. “They pass on their own skills and learn from the best practices of other agencies. This gives them a chance to replicate and enhance their own skills.”

By leveraging partners’ strengths and varied approaches and resources, drowning prevention responses can be scaled up. A collaborative approach is believed to massively increase the potential impact that drowning reduction agencies can have alone.

In order to replicate the same approach in other regions, Dr May Ann suggests that agencies consider organizational meetings to collaborate on a Regional Rescue Olympics. They could also consider the development of protocols on drowning prevention that are

cascaded to all local government units. Aligned with advocacy efforts such as media advertising and conferences, the overall impact could be impressive, she suggests. “To sustain the programme, you have to do activities, it must be alive!” adds Dr May Ann.

The Department of Health Western Visayas drowning prevention strategy has already been introduced to other regions in the Philippines, including the Autonomous Region of Muslim Mindanao and Region 10/ Northern Mindanao. The Philippines Department of Health Western Visayas has showcased the programme in Canada and South Africa during the World Conference on Drowning Prevention in 2017 and 2019.

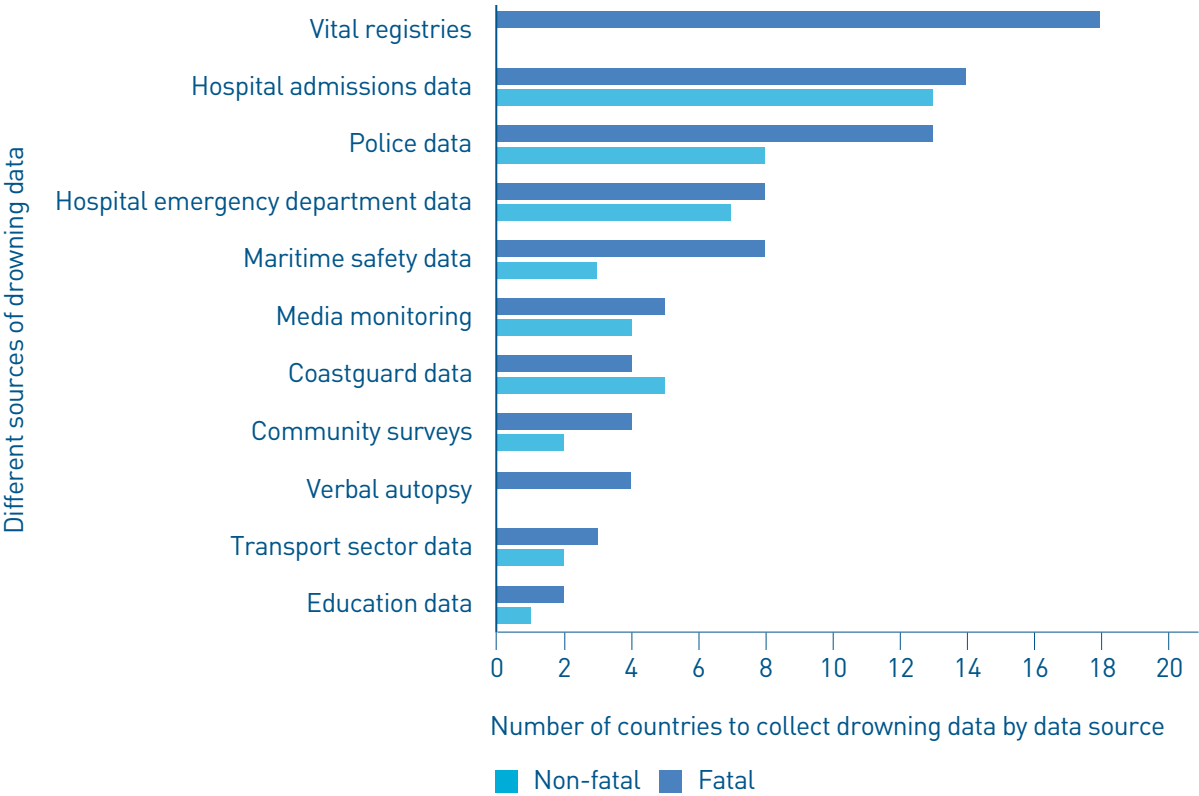
Dr May Ann believes it is important that drowning prevention is recognized as fundamental to healthy populations.

### 3. Advance drowning prevention through data collection and well-designed studies

Fifteen respondents (75%) reported having systems in place to capture national data on both fatal and non-fatal drowning events, three (15%) reported capturing national data on fatal drowning events only, and two (10%) reported capturing no national data on drowning. The most common sources of data on fatal drowning

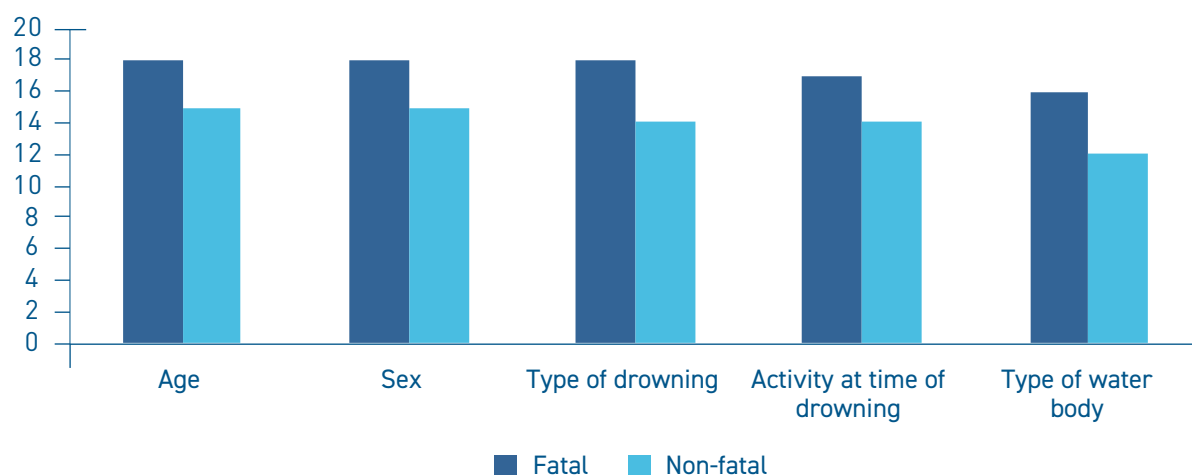
included vital/cause-of-death registries, death certificates, hospital admissions records and police records. The most common sources of data on non-fatal drowning included hospital admissions records, emergency department data and police records (Fig. 12).

**FIG. 12.** Most common official sources of fatal and non-fatal drowning information in the Western Pacific



The quality and completeness of fatal and non-fatal drowning data differed significantly between data sources, with many data collection mechanisms relying on descriptive, discretionary text to capture the details of drowning events. The most common details captured on fatal drowning events were the age and sex of the victim.

Fewer countries captured information on the activity of the individual at the time of drowning, the type of water body in which the drowning event occurred, or the type of drowning that occurred. Greater and more consistent detail was found to be captured on fatal drowning events than non-fatal drowning events (Fig. 13).

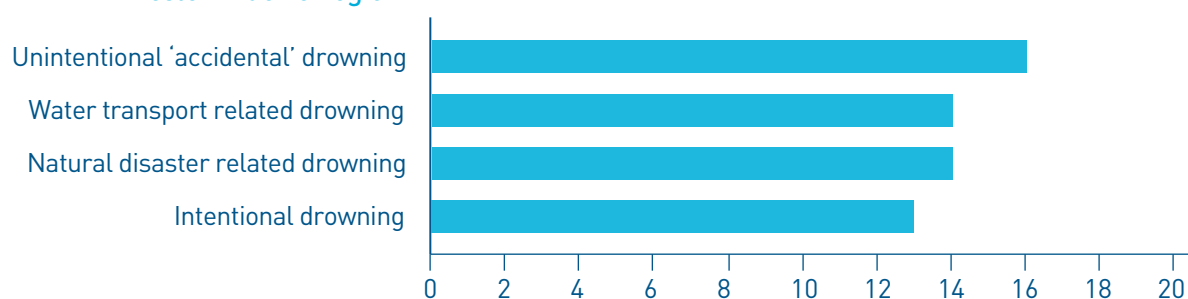
**FIG. 13.** Number of countries and areas capturing specific detail on fatal and non-fatal drowning events in the Western Pacific Region

Source: Global Health Estimates (GHE) data, 2019

While most countries and areas (18; 90%) collected data on drowning, a smaller number (11; 55%) report or publish this information.

The *International Statistical Classification of Diseases and Related Health Problems* (ICD), which provides an international system for reporting diseases and health conditions, contains multiple codes related to drowning. This system is able to capture additional standardized detail on drowning events. The majority of

countries and areas in the Region reported having systems in place to capture detail on drowning events using ICD codes. Data relating to the code “Unintentional ‘accidental’ drowning”<sup>8</sup> were most frequently collected (16 respondents). This was followed by “Water transport related drowning” (14 respondents) and “Natural disaster related drowning” (14 respondents). Fewer countries and areas collected data on “Intentional drowning”<sup>9</sup> (13 respondents) (Fig. 14).

**FIG. 14.** Number of countries and areas that collect drowning data using specific ICD codes, Western Pacific Region

Source: Global Health Estimates (GHE) data, 2019

<sup>8</sup> Unintentional “accidental” drowning: Any drowning event that occurs unplanned, excluding drowning related to a natural disaster or a transport accident.

<sup>9</sup> Intentional drowning: Any drowning event that results from purposeful human action. This includes suicide and homicide.



**CASE STUDY 3. Hong Kong SAR (China): Research helps understand drowning**

The *Hong Kong Drowning Report* – the first-ever review of drowning in Hong Kong SAR (China) – studied Coroner’s Court records and data on unintentional drowning cases in 2012–2016.

Constance Chan Hon-Yee, Director of Health of the Hong Kong SAR Government, said: “The number of deaths due to drowning in Hong Kong is small compared with other major types of injuries, but the fatality rate of drowning cases is remarkably high. With focused data collection and analysis, the *Hong Kong*

*Drowning Report* provides better understanding of the demographic characteristics and scenarios of the drowning fatalities, which is instrumental in formulating targeted preventive measures and risk communication.”

In response to this new research, the Department of Health has recommended various actions, including swimming lessons and first aid training for the general public, enhanced community awareness of drowning risks, and more preparation, supervision and weather planning for water users.

Drowning deaths that occur away from hospitals, particularly in rural and remote areas, may not be issued death certificates or captured through formal death registries. This contributes to an underreporting of drowning deaths. While most respondents (14; 70%) reported having systems in place to capture

drowning deaths that occur away from health facilities, different mechanisms are used to collect this information depending on local context (Table 1). Four countries and areas (20%) reported that a victim must be taken to a hospital for a death to be formally registered.

**TABLE 1. Capturing drowning deaths away from health facilities in selected countries and areas of the Western Pacific Region**

<b>Australia</b>	All unexpected deaths are captured within the National Information Coronial Information System. A doctor may declare death at the scene.
<b>Cook Islands</b>	Nurse practitioners and justices of the peace can confirm/declare deaths on outer islands, within community settings.
<b>Macao SAR (China)</b>	Relatives or the owners of the house in which a death occurs may make an oral declaration of the death within two days to the Civil Registration Office.
<b>Marshall Islands</b>	Death certificates can be issued by the vital registry in response to verbal autopsies conducted on the outer islands.
<b>Viet Nam</b>	Information on drowned victims is reported to local government for verification of death.



#### CASE STUDY 4. Japan: Dynamic data save lives

A new approach to data is being used by the Japan Life-saving Association (JLA) to make real and immediate changes to life-saving responses on the ground. This method sees the JLA collecting specific data on drowning incidents in certain areas, and then using these data to directly target the areas in question with tailored solutions.

This approach gives lifesavers a unique ability to assess and adapt their emergency response to the most common drowning incidents for that area, at that time of day. Toshinori Ishikawa, Drowning Prevention and Rescue General Manager of the

JLA, said: “The life-saving data are very important for understanding potential risks of the beach. If we cannot quantitatively understand what is actually happening on the beach, various measures are meaningless.”

Japan has over 1000 beaches, with lifesavers active at 200 of those located near major cities and in regional areas. Ishikawa says the data-driven approach means that more data from all beaches will be collected in the future. The data are combined with other data from public rescue organizations and are part of a collaboration with the Japan Coast Guard to promote data sharing.





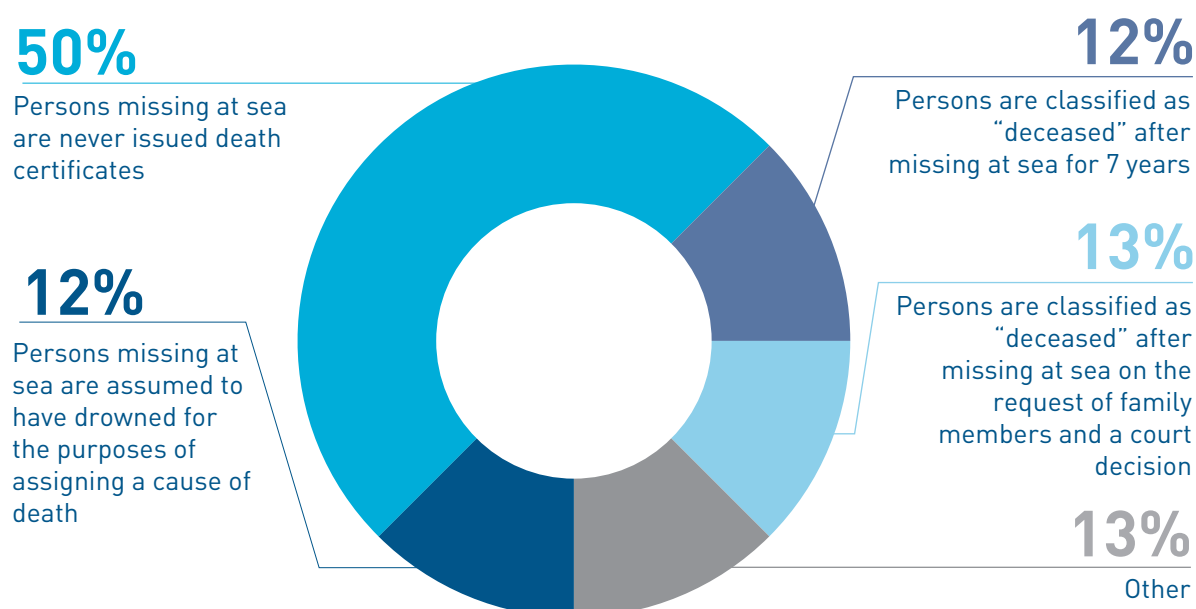
Alcohol is a key risk factor in drowning events,<sup>10</sup> but only five respondents (25%) collected data on the proportion of drowning deaths associated with alcohol: Australia – 33%, Hong Kong SAR (China) – 7.3%, Mongolia – 22%, New Zealand – 15%, Philippines – 13%.

Drowning events that occur at sea are often not captured. If a watercraft fails to reach its destination, the crew and passengers may be classified as “missing at sea” and never issued death certificates.

As drowning is likely to be a major cause of death at sea, this further contributes to an under-reporting of drowning deaths.

Seven countries and areas (35%) issue no death certificate for persons classified as missing at sea; two (10%) assume persons missing at sea to have drowned for the purposes of assigning a cause of death; two (10%) classify a person as “deceased” only after they are missing for seven years; and two (10%) only classify persons missing at sea as deceased on the request of family members and a court decision (Fig. 15).

**FIG. 15.** Various approaches to classifying persons missing at sea in the Western Pacific Region



#### 4. Strengthen public awareness of drowning through strategic communications

In total, 15 respondents (75%) reported implementing mass media communication campaigns directly relevant to drowning prevention, while 16 (80%) reported implementing initiatives to raise awareness of the dangers of consuming alcohol

before or during swimming or boating activities. In addition, 17 (85%) reported implementing initiatives to strengthen awareness and highlight the vulnerability of children to drowning.

<sup>10</sup> See Gender section in Drowning fact sheet (<https://www.who.int/news-room/fact-sheets/detail/drowning#:~:text=Gender,overall%20mortality%20rate%20of%20females.&text=Studies%20suggest%20that%20the%20higher,before%20swimming%20alone%20and%20boating>, accessed 1 May 2021).

### CASE STUDY 5. Australia: “Look after your mates” helps break the link between alcohol and drowning

In Australia, alcohol is implicated in 30–40% of fatal, unintentional drownings. Data indicate extremely high blood alcohol levels in drowning deaths in rivers. In response, the Royal Life Saving Society – Australia (RLSSA) deploys a national advocacy campaign called Respect the River. Now in its seventh year, the campaign encourages communities to enjoy Australia’s beautiful rivers safely by advising them to “Wear a lifejacket; avoid alcohol around water; never swim alone and learn how to save a life” (through cardiopulmonary resuscitation [CPR] and rescue skills).

Amy Peden of the RLSSA explains: “We have a real issue with older men, those in their 50s, 60s and 70s, who drown while boating or fishing because they are significantly intoxicated. That sort of entrenched behaviour is tricky to change.”

To specifically address alcohol, the Don’t Let Your Mates Drink and Drown campaign carried the message

to “look after your mates”, using humour to encourage peer groups to consider group safety while engaging in water-based activities, rather than telling people not to consume alcohol. “It’s very hard to change male behaviour at the individual level, so we feel it’s more effective to appeal to their sense of friendship, and their care for their mates rather than themselves,” she says.

The overarching campaign works well, explains Dr Peden, because it uses not only research and existing data sources to encourage action and policy change, but also a range of media, drowning advocates and local organizations to push the message. “Combined,” she says, “we hope as time goes on to reduce the number of alcohol-related drowning deaths in Australia.”

A campaign evaluation indicates increased knowledge of inland waterways drowning risk, and since the programme began, there has been a significant reduction in fatal drowning in rivers, according to the RLSSA.



## Interventions to prevent drowning

Varied implementation of evidence-based drowning prevention interventions was reported at the community level from across the Region (Fig. 16).

### 1. Provide safe places away from water for preschool children with capable childcare

Capable adult supervision of children while near water is critical to drowning prevention. Fourteen respondents (70%) reported the availability of safe places for preschool children with capable childcare.

### 2. Install barriers controlling access to water

Twelve respondents (60%) reported implementing interventions to promote the use of barriers to control access to water, including the installation of door gates, covering wells and mandatory fencing around water bodies. Seven (35%) reported legislation for fencing around swimming pools to prevent unsupervised children accessing water.

### 3. Teach school-aged children swimming and water safety skills

Swimming and water safety skills are a critical component of drowning prevention. Seventeen respondents (85%) reported that school-aged children are taught basic water safety and safe rescue skills. Schools are an effective entry point for swimming skills and water safety training. In this context, only seven respondents (35%) had legislation stipulating that swimming lessons and water safety competencies be integrated within primary school curricula.

### 4. Train bystanders in safe rescue and resuscitation

Immediate and safe rescue, followed by appropriate resuscitation, are both vital to the survival of a drowning victim and their prospects for avoiding disability. Increasing the number of people capable of responding appropriately and safely in a drowning situation is an important priority in drowning prevention. Nearly all the respondents (19; 95%) reported available programmes to train bystanders in safe rescue and resuscitation, with differing levels of drowning-specific focus.



## CASE STUDY 6. Cook Islands: Safety training high on the agenda

A personal approach to drowning prevention has proven to be successful in Rarotonga in Cook Islands, where individual members of the community personally lead and promote safety initiatives for locals and tourists.

The Cook Islands drowning prevention initiative was galvanized after multiple drowning accidents had occurred across the islands, including a woman who drowned days before her daughter's wedding, a man who attempted a water rescue, and a local man who suffered a heart attack during the island's annual canoeing festival. In response to these tragic events, safety training is now high on the agenda.

Brent Fisher, President of the Water Safety & Surf Life-saving Cook Islands Incorporated, takes charge of automatic external defibrillator (AED) education

and drowning prevention awareness on the island of Rarotonga. Mr Fisher manages a network of defibrillators in community areas, including shops, sports fields and boat quays, on a voluntary basis.

"We teach people how to carry out CPR training, and how to use a defibrillator," he explains. "I've been involved with water safety for many years, and that's how I came to be involved with this work. Most courses are free or subsidized, and I push for getting more defibrillators through local business and government partnerships, and make sure they are maintained."

In 2013, New Zealand High Commissioner, John Carter, made funding available to establish the Cook Islands Water Safety Council.



“Since then, our council has focused on prevention as our main priority. We are now a member of the International Life Saving Federation,” adds Mr Fisher, who works closely with local government body Cook Islands Tourism, which provides funding to develop water safety messaging and training, including a dedicated tourist video about water safety in the lagoon.

New drowning prevention measures on the island include water safety and CPR training for staff of local businesses and accommodation providers, as well as media awareness campaigns, water safety flyers and a school education programme that is being developed.

“We have signage in the lagoon,” he explains, “and on the roads on the way in, telling people where the dangerous passages are. We give out flyers to tourists about water safety, all paid for by Cook Islands Tourism. Their support is just fantastic.”

Other safety measures on the island include a series of Bronze Medallion lifeguard courses, plus other courses on safety boat procedures and training on



how to work with the police to maximize the efficacy of call-outs.

According to Mr Fisher, local support in the community is crucial for drowning prevention in Rarotonga. “Safety is an evolution, and if it’s moving forward for the good, then it’s working,” he says.

## 5. Build resilience and manage flood risks and other hazards locally and nationally

The risk of drowning is increased by flooding, tsunamis, tidal sea surges and heavy rains during typhoons and cyclones – events to which the Region is susceptible. Such events and natural hazards, and their frequency and intensity, are exacerbated by climate change. All the respondents (20; 100%) reported having a national disaster warning system, including advance cyclone warnings, flood warnings and tsunami warnings, with 14 (70%) having legislation

that permits government authorities to use private communication channels to broadcast disaster risk reduction warnings or messages in the lead-up and during a natural disaster or extreme weather event. Sixteen (80%) reported building resilience and managing flood risks and other hazards both locally and nationally, and all (20; 100%) have a dedicated search and rescue service.

## 6. Set and enforce safe boating, shipping and ferry regulations

Shipping and boating regulations across the Region differ significantly among countries and – where subnational regulations exist – within countries, too. Different laws and legislation are associated with different categories of watercraft depending on vessel size, function and area of operation.

Seventeen respondents (85%) had legal definitions and regulations for watercraft that were tailored to vessel length or size, with categories varying across the Region. For example:

- In Cook Islands, “small” watercraft measure less than 24 metres in length and “large” watercraft measure more than 24 metres in length. Safety requirements differ depending on the length of the vessel.
- In Solomon Islands, “small” watercraft measure less than 10 metres in length and “large” watercraft measure

more than 10 metres in length. There is little legislation on the operation of small watercraft.

Periodic safety inspections certify that watercraft are in working order and confirm the availability, accessibility and quality of safety equipment on board. Nineteen respondents (95%) report legislation, albeit to differing levels, mandating periodic watercraft safety inspections.

Eighteen respondents (90%) require watercraft operators to have a specific boating licence. Individuals who are legally responsible for watercraft safety differ among countries and areas: in seven (35%), the watercraft owner, operator and crew are all legally responsible for safety; in a further seven (35%), only the owner and operator are legally responsible for watercraft safety; while in two (10%) only the operator is legally responsible for watercraft safety. Passengers and

charterers were reported to have safety responsibilities in some countries.

Blood alcohol concentration (BAC) is used to measure the level of alcohol intoxication. BAC measures of 0.08 milligrams per millilitre (mg/mL) and above are associated with impairment, including decreased concentration, poorer depth perception and reduced peripheral vision. As a result, many countries and areas ban the operation of vehicles by individuals with a BAC of 0.05 mg/mL or above. Three (15%) respondents have no legislation to prohibit the operation of watercraft under the influence of alcohol. Although 17 respondents (85%) did report having this legislation, only eight (40%) specify limits:

- **Australia:** Varies by state; however, most commonly 0.05 g/mL
- **China:** BAC should not exceed 0.05%, alcohol concentration on the breath should not be higher than 0.25 mg/L
- **Cook Islands:** 0.08 mg/L when operating a motorized vessel; 0.02 mg/L when operating a motorized vessel being used for commercial purposes
- **Hong Kong SAR:** 50 mg/100 mL
- **Japan:** 0.15 mg/L
- **New Zealand:** Maximum concentration of alcohol per litre of breath must not exceed 250 micrograms, maximum concentration of alcohol per 100 millilitres of blood must not exceed 50 milligrams
- **Palau:** 0.1 mg/L.

Twelve respondents (60%) report legislation prohibiting operation of watercraft under the influence of psychoactive drugs.

Overcrowding increases the risk of capsizing and can result in insufficient safety equipment being available on board for all passengers. Fifteen respondents (75%) had legislation specifying the maximum number of occupants permitted on a watercraft to prevent overcrowding. However, exceptions were often listed within this legislation, primarily exempting small, non-motorized watercraft from passenger capacity laws. Four countries and areas (20%) had no legislation regarding watercraft passenger capacity.

Overloading occurs when a watercraft is carrying too much weight, which again increases risk of capsizing, particularly in poor weather, and reduces the responsiveness of a vessel in emergency situations. Seventeen respondents (85%) reported legislation specifying maximum weight permitted on watercraft. Once again, exceptions were often listed within this legislation, primarily allowing small, non-motorized watercraft to be exempt from maximum weight laws. Two respondents (10%) had no legislation regarding watercraft maximum weight.

Access to suitable and appropriate life-saving equipment on board a watercraft is important for ensuring passenger safety if the vessel overturns or is submerged, particularly for passengers with poor or no swimming ability. Eighteen respondents (90%) have guidelines for minimum requirements of safety equipment on board watercraft. More specifically, 19 (95%) specify the legal requirement to carry life jackets; 13 (65%) specify personal flotation devices; 13 (65%) specify throwable devices



such as life rings or buoys; and four (20%) specify life rafts, lifeboats and/or rescue boats. Further, 19 countries and areas (95%) had legislation stipulating that a sufficient amount of on-board life-saving equipment must be available to meet maximum vessel passenger capacity.

To prevent the sale and purchase of faulty life jackets, standards ensure that users are buying high-quality devices that are guaranteed to increase the buoyancy of an individual when in water. Life jacket

legislation in 17 responding countries and areas (85%) specified a standard that must be met, most commonly corresponding to the requirements for life jackets as per the International Convention for the Safety of Life at Sea (SOLAS).

Life jackets are most effective when fastened correctly and always worn while on board a watercraft. Just eight respondents (40%) had legislation explicitly stating that life jackets must be fastened during use.





## CASE STUDY 7. Papua New Guinea: Adapting life-saving equipment to suit local needs

Life-saving experts are developing innovative life-saving solutions for indigenous coastal communities in Papua New Guinea that are at increasing risk from dinghy accidents. The team has developed new ways to overcome a lack of take-up for life jackets on the thousands of dinghies operating in the region where, due to poverty, revenue often takes priority over safety.

“We thought hard about how to reduce casualties when a dinghy sinks or is swamped, bearing in mind the economic limitations of dinghy operators, and the extended survival times for casualties in warm tropical seas,” said Peter Bell, Manager, Safety, Search and Rescue for the National Maritime Safety Authority (NMSA) of Papua New Guinea.

Traditionally, small boats transport most local people in Papua New Guinea to work and school. For the country’s 5 million people living in coastal and maritime provinces and surviving on subsistence-level activities such as agriculture and fishing, small craft are the only transport available. Over time, old-fashioned dug-out canoes and outriggers have been replaced by more modern dinghies.

Over 95% of sea travel in and around the country is now on locally made, 7-metre long, open fibreglass dinghies. There are an estimated 15 000 of these dinghies in use. According to the United Nations Development Programme, 40 million passenger trips are made each year worldwide using this type of craft. Dinghies have the capacity to carry



large loads of up to 970 kilograms and can travel extended distances – some make open sea voyages of over 400 kilometres.

As the number of dinghies has increased, so has the number of fatal drownings and incidents of people missing at sea. Such incidents are mainly caused by overloading dinghies and their lack of buoyancy. Problems during sinking or swamping incidents include a lack of life jackets and the fact that dinghies are difficult to spot in the water.

In response to an increasing number of fatalities, the Government of Papua New Guinea has introduced new legislation. Dinghies are now required to carry safety equipment, including life jackets. Load limits are also now in place for dinghies. However, in isolated coastal locations, there is no capacity for enforcing these laws. Realistically, most local people running dinghy services cannot afford to purchase safety equipment, nor can they afford to decrease loading, whether of people or cargo.

The NMSA has distributed over 5000 free life jackets to at-risk communities across the country. However, follow-up checks on dinghies at sea have found negligible carry rates. Interviews with operators indicate that life jackets provided were being used for other purposes in villages, including bedding;

that life jackets take up needless space that could be used for carrying paying passengers and additional freight; and that life jackets had quickly deteriorated from exposure to the elements, saltwater and fuel contamination within the dinghy.

Recognizing this, the NMSA worked with the local dinghy manufacturer to change the design, colour and buoyancy of dinghies, without an increase to the retail price. Now, dinghies are bright orange and therefore much easier to spot by search and rescue operations. They have better buoyancy and are able to maintain level flotation when swamped.

However, the survivability of passenger casualties in the water remains an issue for all passengers who continue to board the estimated 8000 older boats still in use that have only basic flotation devices.

To address this, the NMSA is developing a unique commercial “float off” flotation device specifically for Papua New Guinea. The device has grab handles to support 14 casualties, secured by lanyards, as well as additional capacity for children or the injured on the upper surface. It has two waterproof lockers – one for supplied safety equipment and valuables, the other for perishable items like food or fish. The device

has been tailored to fit the width of a dinghy, replacing existing wooden flooring and seating. Therefore, it does not reduce load space. The device does not have any alternative on-land use, as do life jackets, and therefore cannot be repurposed. On water, it can be used as a catch landing platform for fishing, which will encourage the device being carried on board.

According to indicative costing (including rescue equipment packaged in the smaller waterproof locker), and assuming a serviceable life span of two years for a life jacket and more than 10 years for the device, the new flotation device is seven times more cost-effective than supplying life jackets.

The Australian Maritime Safety Authority, as a member of the Torres Strait Maritime Safety Committee,













is distributing a commercial version of the flotation device to indigenous communities in the Torres Strait. This mission has been funded by the Queensland Government.

The new dinghy and the flotation device also have other benefits, keeping multiple casualties grouped together instead of being quickly dispersed across a wide area of sea during a sinking or swamping incident, and being highly visible (compared to life jackets) from the air and water. Furthermore, in dark conditions, in rough seas and in panic, casualties in the sea instinctively grab hold of a floating object, making the flotation device much easier to use compared to the difficulties of staying afloat while trying to put on a life jacket, particularly when infants or children are involved.





**FIG. 16.** Proportion of countries reporting implementation of specific drowning prevention interventions

Selected drowning prevention interventions	Share of countries and areas reporting implementation	Selected drowning prevention interventions	Share of countries and areas reporting implementation
<b>PHYSICAL BARRIERS</b>  Install barriers controlling access to water (for example, door barriers, covering of wells, swimming pool fencing)	60%	<b>PUBLIC AWARENESS ON ALCOHOL AND SWIMMING/BOATING</b>  Raising awareness on dangers of consuming alcohol before or during swimming or boating activities	80%
<b>SWIMMING SKILLS TRAINING</b>  Teach school-aged children basic swimming, water safety and safe rescue skills	85%	<b>RESCUE AND RESUSCITATION</b>  Train bystanders in safe rescue and resuscitation	95%
<b>CHILDCARE</b>  Provide safe places for preschool children with capable childcare	70%	<b>LIFEGUARDS</b>  Use of lifeguards at public swimming venues	55%
<b>PUBLIC AWARENESS ON DROWNING</b>  Strengthen awareness and highlight the vulnerability of children to drowning	85%	<b>SEARCH AND RESCUE</b>  Dedicated search and rescue service	100%
<b>MANAGE FLOOD RISKS</b>  Build resilience and manage flood risks and other hazards locally and nationally	80%	<b>MARITIME SAFETY</b>  Maritime safety regulations	85%
<b>DISASTER WARNING SYSTEMS</b>  Advance cyclone/ flood/tsunami warning systems	100%	<b>MEDIA</b>  Mass media communication campaigns for drowning prevention	75%





3





# Recommendations

This first regional assessment on drowning prevention in the Western Pacific is an important step in understanding why drowning occurs and what can be done to most effectively prevent it. This report highlights progress made across the Region, while identifying gaps and opportunities to address this avoidable public health issue.

**Drowning is a largely unrecognized threat to health and well-being.** This lack of awareness often translates into a lack of resources and technical capacity at the national level to roll out multisectoral drowning prevention strategies in many countries.

**Reflective of the diversity of the Region, the impact of drowning and effective approaches to its prevention often differ at the national, and subnational, levels.**

While certain countries and areas have well-developed water safety strategies and well-established national mechanisms for drowning prevention, others are in early stages of expanding or linking smaller-scale water safety interventions at the community level. It is critical to share stories across this spectrum of experience to support progress at all levels in advancing the drowning prevention agenda.



Seven key lessons and associated recommendations emerged as a result of this assessment:

## **LESSON 1** Many countries and areas have no clear national leadership to champion action on drowning prevention:

Establishing a lead agency or coordination body for drowning prevention, with appropriate capacity and sustained funding, is critical to ensuring a clear mandate and long-term commitment. This can be an important step to overcoming institutional capacity barriers and ensuring that institutional-strengthening initiatives are tailored to country capacity.

### **RECOMMENDATION 1**

**National governments should designate a national lead agency, or support establishment of a multisector coordination body, to drive coordinated drowning prevention efforts.**

## **LESSON 2** Many countries and areas have no national water safety plans and policies:

Only 20% of the countries and areas that participated in the regional assessment had a national water safety plan as recommended in the 2014 WHO *Global Report on Drowning*. National plans should have appropriate targets, be coordinated and integrated with all relevant stakeholders and sectors, be evidence based and data driven, and continually monitored for evaluation. Progress indicators are important for informing the public and decision-makers about drowning, for informing actions required

to address drowning, and for monitoring progress of drowning prevention efforts. If more appropriate, entry points for drowning prevention can be sought within other relevant national strategies. If led by the ministry of health, it may be convenient to include drowning prevention within broader national injury prevention strategies.

### **RECOMMENDATION 2**

**National governments should develop and implement a national water safety plan that contains measurable indicators for drowning prevention. Indicators should include outcome and performance measures, and be aligned to SDG goals and targets.**

## **LESSON 3** Multisectoral collaboration, coordination and accountability needs to be strengthened:

While there is some national multisectoral collaboration on drowning prevention in many countries, more substantial and in-depth efforts are needed to further strengthen these functions. Formalizing approaches may increase visibility of the issue at the national level, promote mutual learning and advance development of a national drowning prevention strategy, policy or plan.

### **RECOMMENDATION 3**

**National governments and other relevant stakeholders should formalize multisectoral mechanisms to address drowning prevention and water safety by establishing partnerships across sectors and assigning clear roles and responsibilities.**

## LESSON 4 **Knowledge sharing is low:**

Knowledge sharing is a key ingredient for innovation and action, and is vital at national, regional and global levels. A key aim should be to promote the uptake and use of existing guidance and standards, build partnerships to support effective drowning prevention networks, and provide training and capacity-building. Publishing findings through peer-reviewed articles and in international forums (concerning public health, climate change and disaster risk reduction) should be a priority.

### RECOMMENDATION 4

**National governments and other relevant stakeholders should document and share knowledge gained in drowning prevention efforts, nationally and regionally.**

## LESSON 5 **Water safety legislation**

**is often difficult to interpret and poorly enforced:** Most participating countries and areas reported having water safety legislation in place, yet the legislation was often outdated or difficult to interpret. Further, many also reported lacking capacity and resources to ensure effective implementation and enforcement of existing legislation.

### RECOMMENDATION 5

**National governments should perform a comprehensive review of drowning prevention legislation to ensure best practice laws are developed and that appropriate resources for implementation and enforcement are available.**

## LESSON 6 **Evaluation of drowning**

**prevention efforts is often not carried out:** Most countries and areas participating in this status report indicated several interventions for drowning prevention being implemented, but very few were evaluated. Evaluation can demonstrate intervention impact, efficacy and value for money.

### RECOMMENDATION 6

**National governments and relevant stakeholders should evaluate drowning prevention intervention plans and programmes from the outset, ensuring evaluation is adequately planned for and funded. Evaluations should be considered for publication in peer-reviewed literature.**

## LESSON 7 **Data on drowning (fatal and non-fatal) often have limited coverage and completeness:**

While nearly all participating countries and areas collect drowning data, some do not compile them into official reports, making it difficult for decision-makers to fully monitor the extent, scale and location of the drowning burden. Evidence-based data are not only crucial for understanding the numbers of deaths and injuries, but also for understanding drowning exposure risks, intermediate outcomes and socioeconomic costs.

### RECOMMENDATION 7

**National governments should strengthen data systems that capture drowning incidents, while improving the availability and quality of reporting.**

## KEY RECOMMENDATIONS FOR DROWNING PREVENTION IN THE WESTERN PACIFIC REGION

	<b>1</b>	Designate a national lead agency, or support establishment of a multisector coordination body, to drive coordinated drowning prevention efforts.
	<b>2</b>	Develop and implement a national water safety plan that contains national indicators for drowning prevention.
	<b>3</b>	Formalize multisectoral mechanisms to address drowning prevention and water safety by establishing partnerships across sectors and assigning clear roles and responsibilities.
	<b>4</b>	Document and share knowledge gained in drowning prevention efforts, nationally and regionally.
	<b>5</b>	Perform a comprehensive review of drowning prevention legislation to ensure best practice laws are developed, where absent, and that appropriate resources for implementation and enforcement are available.
	<b>6</b>	Evaluate drowning prevention intervention plans and programmes from the outset, ensuring evaluation is adequately planned for and funded.
	<b>7</b>	Strengthen data systems that capture drowning incidents, while improving the availability and quality of reporting.









A vertical photograph on the left side of the page shows a person's profile from the chest up, looking out over a body of water towards a sunset. The sky is filled with orange and yellow clouds, and the water reflects the light. A solid blue rectangle is in the top left corner.

# Conclusions

**This report presents findings from the first assessment of drowning prevention in the Western Pacific Region. The report is a key step in accelerating advocacy and action to minimize the 74 000 preventable deaths that occur each year in the Region. This report also acts as a baseline to measure future regional progress in drowning prevention.**

The consultation conducted for this report found that, despite many challenges and barriers, countries and areas across the Western Pacific Region continue to advance the drowning prevention agenda forward through work related to recognizing the impact of drowning and the implementation actions and programmes to prevent harm. The sector is growing, and – while perhaps not always formally recognized as such – drowning prevention is an endeavour resulting in strong multisectoral collaborations and action.

Since the publication of the WHO *Global Report on Drowning* in 2014, regional work in drowning prevention has expanded. However, these efforts remain disparate across the Western Pacific, reflective of the Region's wide geographic and socioeconomic diversity. The regional consultation process drew together participants and their experiences from different sectors, in many cases for the first time, and has sparked recognition and momentum among many countries and areas on the need for further action to reduce drowning. This is encouraging and presents an opportunity to leverage and grow existing networks to address drowning prevention among stakeholders already working together on shared multisectoral challenges.



In line with *Preventing Drowning: An implementation guide*, published in 2017, interventions should be evidence based and advance drowning prevention through data collection and well-designed studies. It is crucial that programmes are evaluated and implemented based on impact and cost-effectiveness on reducing drowning.

Good coordination and collaboration, with strong leadership, are crucial. As with all injury prevention initiatives, addressing drowning requires a multisectoral approach. It is important to formalize this approach (through the development of a strategy or policy, or establishment of a coordination mechanism), assigning clear roles and responsibilities to different sectors and organizations, and developing a monitoring plan that includes quantitative indicators to ensure progress.

When developing a drowning prevention strategy, it is crucial to have a plan in place to ensure strategy endorsement. In many instances, national drowning prevention strategies within the Region have stalled

between development and endorsement, with their implementation blocked.

This report highlights achievements and progress to date and aims to celebrate and champion them. Our vision is that this report provides a useful tool for countries and areas to further expand their own drowning prevention efforts, resulting in increased water safety and a reduction in drowning deaths in the Region.

This report may be updated periodically to track progress made and identify emerging priorities.

As highlighted throughout the report, drowning is preventable.

The data collected in this report have highlighted the diversity and commitment of the drowning prevention community across the Region. The recommendations made in this report provide guidance on action to prevent drowning. We must continue to monitor and evaluate the implementation of this work to improve programmes, respond to emerging challenges, and ultimately improve the health and well-being of our communities.









# Country profiles



MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES AUSTRALIA HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? YES

SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Disaster risk reduction | Meteorology Department | Ministry of Transport | Maritime safety | Coastguard | Ministry of Sport | Royal Life Saving Society Australia | Surf Life Saving Australia

INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	<div></div>	HIGH	YES
Swim skills training	<div></div>	HIGH	YES
Childcare	<div></div>	HIGH	-
Public awareness on drowning	<div></div>	HIGH	YES
Manage flood risks	<div></div>	MED	YES
Disaster warning systems	<div></div>	HIGH	YES
Public awareness on alcohol and swimming/boating	<div></div>	MED	YES
Rescue and resuscitation	<div></div>	MED	YES
Lifeguards	<div></div>	HIGH	YES
Search and rescue	<div></div>	HIGH	YES
Maritime safety	<div></div>	HIGH	YES
Media	<div></div>	MED	YES

SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	<div></div>	<div></div>	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	<div></div>	<div></div>	<div></div>	<div></div>
Hospital emergency department data	<div></div>	<div></div>	<div></div>	<div></div>
Police	<div></div>	<div></div>	<div></div>	<div></div>
Transport sector	<div></div>	<div></div>	<div></div>	<div></div>
Education sector	-	-	-	-
Maritime safety	<div></div>	<div></div>	<div></div>	<div></div>
Coastguard	<div></div>	<div></div>	<div></div>	<div></div>
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	<div></div>	<div></div>	<div></div>	<div></div>

Age Sex Type of drowning event Activity Water body

Drowning deaths in community settings are captured YES

Persons missing at sea are assumed to have died YES

Persons missing at sea are assumed to have drowned YES

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL 33%

STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES AUSTRALIA HAVE A NATIONAL WATER SAFETY STRATEGY? YES

Are measurable targets to reduce drowning included? YES

If yes, please specify:  
The National Australian Water Safety Strategy 2030 has the goal to reduce drowning by 50% by 2030.

Do these strategies align with relevant SDGs? NO

Are plans underway, or is there interest, to develop a national water strategy? -

LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	<div></div>	8
Mandated licensing of watercraft	YES	<div></div>	8
Mandated periodic safety inspections of watercraft	YES	<div></div>	7
Mandated licensing of the operator	YES	<div></div>	7
Individuals responsible for overall safety of watercraft	Owner/Operator/Crew/ Enforcement officers		
Law against alcohol consumption and boating	YES	<div></div>	7
If yes, specify blood alcohol concentration limit:	0.05%	-	
Law against drug use and boating	YES	<div></div>	7
Restrictions on watercraft passenger capacity	YES	<div></div>	5
Restrictions on watercraft load capacity	YES	<div></div>	5
Mandated provision of lifejackets on board watercraft	YES	<div></div>	9
Specific standard of lifejacket required	Varies by state		
Specific number of lifejackets required	YES	<div></div>	9

Watercraft often exempt from national maritime legislation:  
Some exemptions exist to certain regulations, by state.

CHILD SAFETY	
Fencing to exclude children from swimming pools	YES <div></div> 9
Swimming lessons in school curricula	YES <div></div> 7
Structured adult supervision of preschool children	YES <div></div> 10
Prosecution of neglect against children	YES <div></div> 9

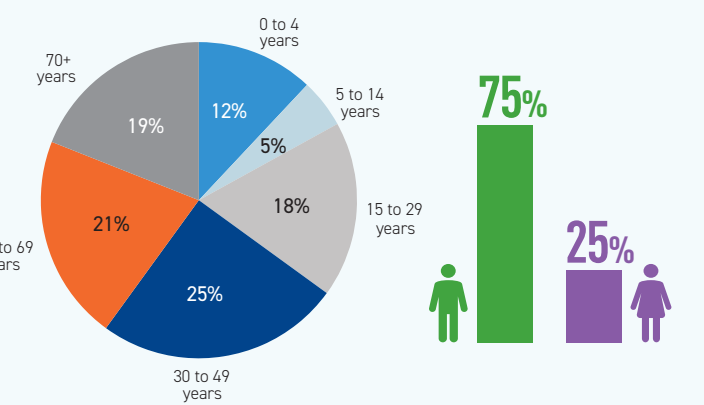
WATER SAFETY COMPETENCIES	
Required competencies for swimming instructors	YES <div></div> 8
Required competencies for lifeguards	YES <div></div> 8

DISASTER RISK REDUCTION	
Private communication channels broadcast disaster warnings	YES <div></div> 8

DROWNING DATA	
One agency maintains all vital registry statistics	- -

- No response or not applicable

SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>

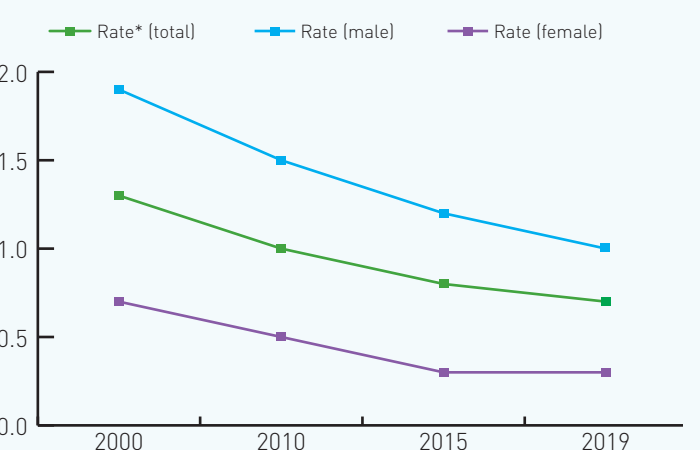


<sup>a</sup>Global Health Estimates (GHE) data, 2019

<sup>b</sup>GHE data, 2000–2019

National Drowning Reports developed by Royal Life Saving Society – Australia available: <https://www.royallife-saving.com.au/research-and-policy/drowning-research/national-drowning-reports>

RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

**DOES CAMBODIA HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?** NO

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Ministry of Interior | National Committee for Disaster Management | Ministry of Water Resource and Meteorology | Ministry of Transportation and Public Work | Maritime safety | Coastguard/Military

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	LOW	-
Swim skills training	●	LOW	-
Childcare	●	LOW	-
Public awareness on drowning	●	LOW	-
Manage flood risks	●	HIGH	-
Disaster warning systems	●	HIGH	-
Public awareness on alcohol and swimming/boating	●	LOW	-
Rescue and resuscitation	●	LOW	-
Lifeguards	●	LOW	-
Search and rescue	●	-	-
Maritime safety	-	-	-
Media	●	LOW	-

## SOURCES OF DROWNING DATA

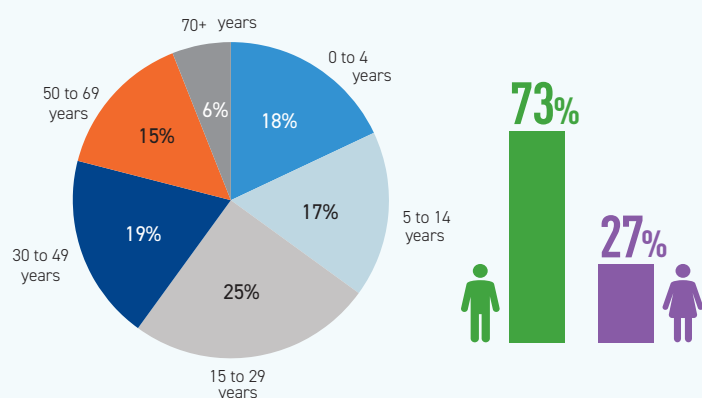
SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	-	-	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	-	-	-	-
Hospital emergency department data	-	-	-	-
Police	-	-	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured -  
Persons missing at sea are assumed to have died -  
Persons missing at sea are assumed to have drowned -

**PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL** -

## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

**DOES CAMBODIA HAVE A NATIONAL WATER SAFETY STRATEGY?** NO

Are measurable targets to reduce drowning included? -  
If yes, please specify:

Do these strategies align with relevant SDGs? -

Are plans underway, or is there interest, to develop a national water strategy? YES

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	YES	-
Mandated licensing of watercraft	YES	-
Mandated periodic safety inspections of watercraft	YES	-
Mandated licensing of the operator	YES	-
Individuals responsible for overall safety of watercraft	Owner/Operator	
Law against alcohol consumption and boating	NO	-
If yes, specify blood alcohol concentration limit:	-	-
Law against drug use and boating	NO	-
Restrictions on watercraft passenger capacity	NO	-
Restrictions on watercraft load capacity	NO	-
Mandated provision of lifejackets on board watercraft	YES	-
Specific standard of lifejacket required	NO	
Specific number of lifejackets required	YES	-

Watercraft often exempt from national maritime legislation:

**Small traditional boats for family use.**

### CHILD SAFETY

Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	NO	-
Prosecution of neglect against children	YES	-

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	-	-
Required competencies for lifeguards	-	-

### DISASTER RISK REDUCTION

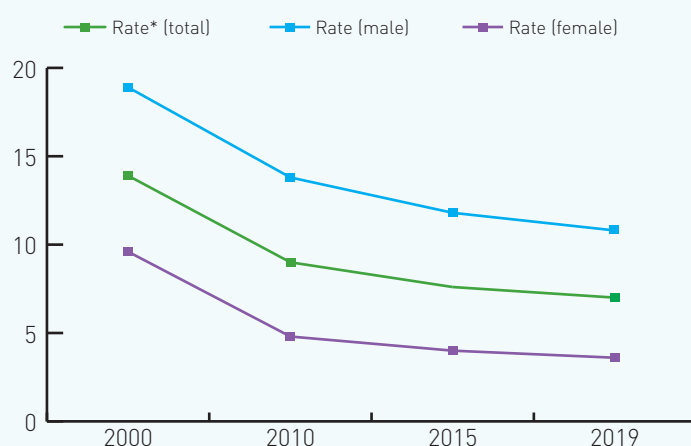
Private communication channels broadcast disaster warnings	YES	-
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### DROWNING DATA

One agency maintains all vital registry statistics	YES	-
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- No response or not applicable

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate



MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES CHINA HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? -

SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Meteorology Department | Ministry of Transport

INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	-	-
Swim skills training	●	-	-
Childcare	●	-	-
Public awareness on drowning	●	-	-
Manage flood risks	●	HIGH	-
Disaster warning systems	●	HIGH	-
Public awareness on alcohol and swimming/boating	●	-	-
Rescue and resuscitation	●	-	-
Lifeguards	●	HIGH	-
Search and rescue	●	-	-
Maritime safety	●	-	-
Media	●	-	-

SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■	N/A	-
Verbal autopsy	●	■ ■ ■ ■	N/A	-
Hospital admission data	●	■ ■ ■	●	■ ■ ■
Hospital emergency department data	●	■ ■ ■	●	■ ■ ■ ■ ■
Police	●	■ ■ ■ ■ ■	-	-
Transport sector	-	-	-	-
Education sector	●	■ ■ ■	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured YES

Persons missing at sea are assumed to have died NO

Persons missing at sea are assumed to have drowned NO

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL -

STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES CHINA HAVE A NATIONAL WATER SAFETY STRATEGY? YES

Are measurable targets to reduce drowning included? NO

If yes, please specify:

Do these strategies align with relevant SDGs? -

Are plans underway, or is there interest, to develop a national water strategy? -

LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	YES	
Mandated licensing of watercraft	YES	
Mandated periodic safety inspections of watercraft	YES	
Mandated licensing of the operator	YES	
Individuals responsible for overall safety of watercraft	-	
Law against alcohol consumption and boating	YES	
If yes, specify blood alcohol concentration limit:	0.0005	
Law against drug use and boating	YES	
Restrictions on watercraft passenger capacity	YES	
Restrictions on watercraft load capacity	YES	
Mandated provision of lifejackets on board watercraft	YES	
Specific standard of lifejacket required	SOLAS	
Specific number of lifejackets required	YES	

Watercraft often exempt from national maritime legislation: None.

CHILD SAFETY

Fencing to exclude children from swimming pools	-	-
Swimming lessons in school curricula	-	-
Structured adult supervision of preschool children	-	-
Prosecution of neglect against children	YES	

WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	-	-
Required competencies for lifeguards	-	-

DISASTER RISK REDUCTION

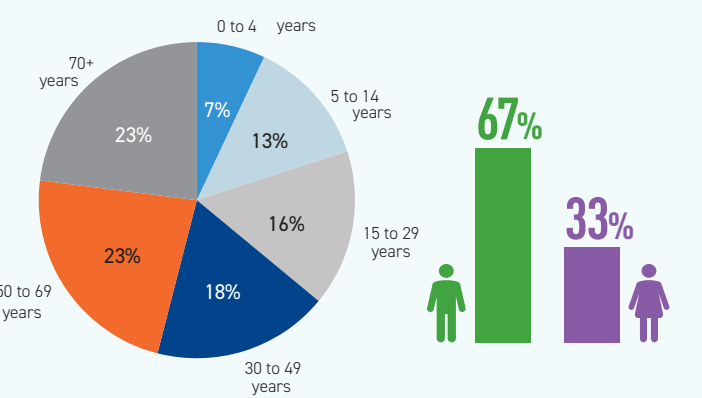
Private communication channels broadcast disaster warnings	-
--	---

DROWNING DATA

One agency maintains all vital registry statistics	NO
--	----

- No response or not applicable

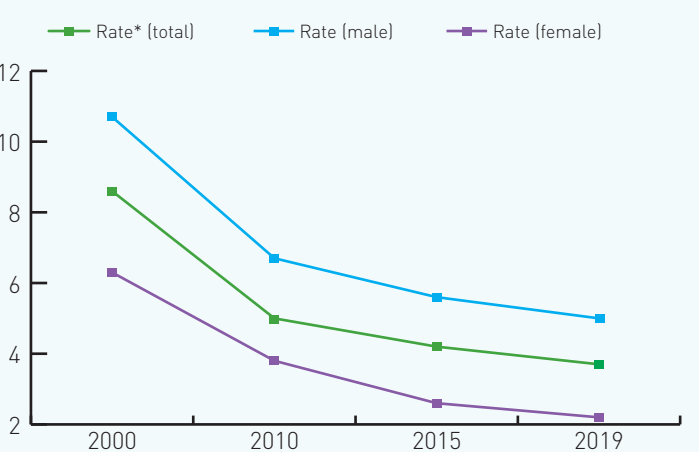
SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate

MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES COOK ISLANDS HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? NO

SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Ministry of Transport | Water Safety Cook Islands | Red Cross | Ports Authority | Coroner | Ministry of Marine Resource | Ministry of Tourism

INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	<div></div>	MED	NO
Swim skills training	<div></div>	LOW	NO
Childcare	<div></div>	HIGH	NO
Public awareness on drowning	<div></div>	HIGH	NO
Manage flood risks	<div></div>	HIGH	NO
Disaster warning systems	<div></div>	HIGH	NO
Public awareness on alcohol and swimming/boating	<div></div>	HIGH	NO
Rescue and resuscitation	<div></div>	HIGH	NO
Lifeguards	<div></div>	LOW	NO
Search and rescue	<div></div>	HIGH	NO
Maritime safety	<div></div>	HIGH	NO
Media	<div></div>	HIGH	NO

SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	<div></div>	<div></div>	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	<div></div>	<div></div>	<div></div>	<div></div>
Hospital emergency department data	-	-	-	-
Police	<div></div>	<div></div>	-	-
Transport sector	<div></div>	<div></div>	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	<div></div>	<div></div>	<div></div>	<div></div>

AgeSexType of drowning eventActivityWater body

Drowning deaths in community settings are captured	YES
Persons missing at sea are assumed to have died	NO
Persons missing at sea are assumed to have drowned	NO

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL -

SHARE OF DROWNING DEATHS BY AGE GROUP

GHE data not available

STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES COOK ISLANDS HAVE A NATIONAL WATER SAFETY STRATEGY? NO

Are measurable targets to reduce drowning included? -

If yes, please specify:

Do these strategies align with relevant SDGs? -

Are plans underway, or is there interest, to develop a national water strategy? YES

LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	YES	<div>7</div>
Mandated licensing of watercraft	YES	<div>7</div>
Mandated periodic safety inspections of watercraft	YES	<div>7</div>
Mandated licensing of the operator	YES	<div>7</div>
Individuals responsible for overall safety of watercraft	Owner/Operator/Crew	
Law against alcohol consumption and boating	YES	<div>3</div>
If yes, specify blood alcohol concentration limit: 0.08 for all motorized vessels, 0.02 for motorized vessels being used for commercial purposes		
Law against drug use and boating	NO	-
Restrictions on watercraft passenger capacity	NO	-
Restrictions on watercraft load capacity	YES	<div>7</div>
Mandated provision of lifejackets on board watercraft	YES	<div>7</div>
Specific standard of lifejacket required	EN ISO 12402 or AS 4758	
Specific number of lifejackets required	YES	<div>6</div>

Watercraft often exempt from national maritime legislation: Non-motorized vessels.

CHILD SAFETY		
Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	NO	-
Prosecution of neglect against children	YES	<div>8</div>

WATER SAFETY COMPETENCIES		
Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	YES	<div>9</div>

DISASTER RISK REDUCTION		
Private communication channels broadcast disaster warnings	NO	-

DROWNING DATA		
One agency maintains all vital registry statistics	NO	-

- No response or not applicable

RATE OF DROWNING DEATHS

GHE data not available

# HONG KONG SAR (CHINA)

Population: 7 507 400  
Income group: High  
Gross national income per capita: US\$ 48 630 (2020)



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES HONG KONG SAR (CHINA) HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? **YES**

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Meteorology Department | Maritime safety | Leisure and Cultural Services Department | Social Welfare Department

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	HIGH	-
Swim skills training	●	MED	NO
Childcare	●	HIGH	NO
Public awareness on drowning	●	-	NO
Manage flood risks	●	HIGH	YES
Disaster warning systems	●	HIGH	YES
Public awareness on alcohol and swimming/boating	●	-	NO
Rescue and resuscitation	●	HIGH	NO
Lifeguards	●	HIGH	YES
Search and rescue	●	HIGH	-
Maritime safety	●	HIGH	-
Media	●	-	-

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	-	-	●	■ ■ ■ ■ ■
Hospital emergency department data	-	-	-	-
Police	-	-	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	●	■ ■ ■ ■ ■
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured **YES**  
Persons missing at sea are assumed to have died **NO**  
Persons missing at sea are assumed to have drowned **NO**

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL **7.3%**

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES HONG KONG SAR (CHINA) HAVE A NATIONAL WATER SAFETY STRATEGY? **YES**

Are measurable targets to reduce drowning included? **NO**

If yes, please specify:

Do these strategies align with relevant SDGs? **NO**

Are plans underway, or is there interest, to develop a national water strategy? **N/A**

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	YES	8
Mandated licensing of watercraft	YES	8
Mandated periodic safety inspections of watercraft	YES	8
Mandated licensing of the operator	YES	8
Individuals responsible for overall safety of watercraft	Owner/Operator	
Law against alcohol consumption and boating	NO	-
If yes, specify blood alcohol concentration limit:		
Law against drug use and boating	NO	-
Restrictions on watercraft passenger capacity	YES	8
Restrictions on watercraft load capacity	YES	8
Mandated provision of lifejackets on board watercraft	YES	8
Specific standard of lifejacket required	EN ISO 12402, and by LSA code	
Specific number of lifejackets required	YES	8

Watercraft often exempt from national maritime legislation:  
**Occasionally vessels less than 10 metres in length, with an engine power of less than 12 kW**

CHILD SAFETY	
Fencing to exclude children from swimming pools	YES -
Swimming lessons in school curricula	NO -
Structured adult supervision of preschool children	YES 8
Prosecution of neglect against children	YES 9

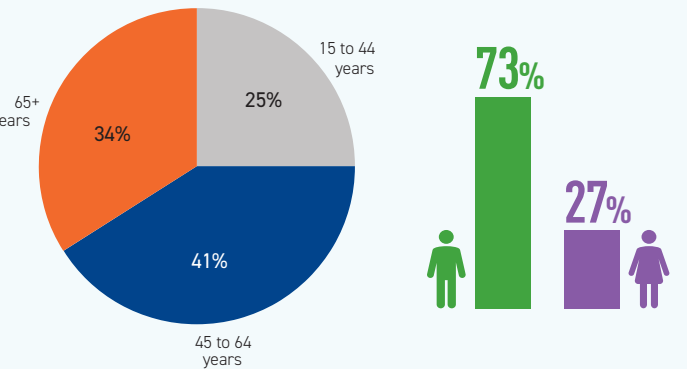
WATER SAFETY COMPETENCIES	
Required competencies for swimming instructors	NO -
Required competencies for lifeguards	YES 8

DISASTER RISK REDUCTION	
Private communication channels broadcast disaster warnings	YES -

DROWNING DATA	
One agency maintains all vital registry statistics	YES 8

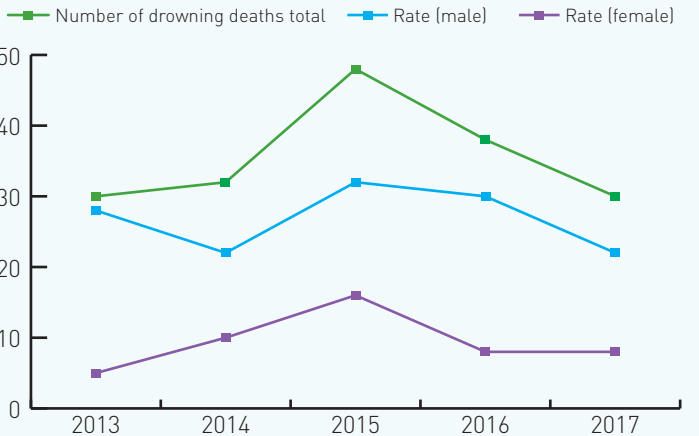
- No response or not applicable

## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Data from Department of Health  
<sup>b</sup> Data from Department of Health

## NUMBER OF DROWNING DEATHS OVER TIME<sup>b</sup>



\* rate = age-standardized death rate





## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES JAPAN HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? **NO**

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Meteorology Department | Ministry of Transport | Maritime safety | Coastguard/Military | Japan Life-saving Association

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	-	-	-
Swim skills training	●	HIGH	-
Childcare	●	HIGH	-
Public awareness on drowning	●	MED	YES
Manage flood risks	●	HIGH	-
Disaster warning systems	●	HIGH	-
Public awareness on alcohol and swimming/boating	●	MED	-
Rescue and resuscitation	●	HIGH	-
Lifeguards	●	HIGH	-
Search and rescue	●	HIGH	-
Maritime safety	●	HIGH	-
Media	●	HIGH	-

## SOURCES OF DROWNING DATA

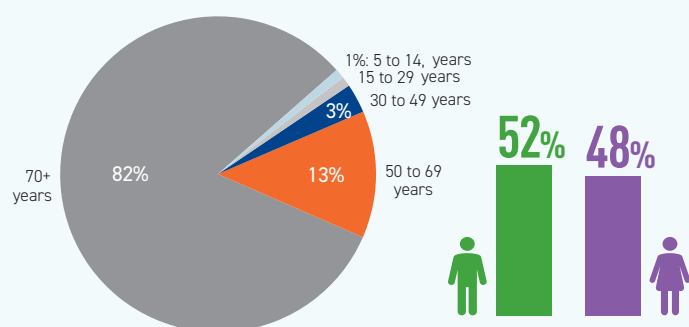
SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	-	-	-	-
Hospital emergency department data	-	-	-	-
Police	●	■ ■ ■ ■ ■	●	■
Transport sector	-	-	-	-
Education sector	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Maritime safety	-	-	●	■ ■ ■ ■ ■
Coastguard	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Tourism sector	-	-	-	-
National community survey	●	■ ■ ■ ■ ■	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured **NO**  
Persons missing at sea are assumed to have died **NO**  
Persons missing at sea are assumed to have drowned **NO**

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL **-**

## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES JAPAN HAVE A NATIONAL WATER SAFETY STRATEGY? **NO**

Are measurable targets to reduce drowning included? **-**  
If yes, please specify:

Do these strategies align with relevant SDGs? **-**

Are plans underway, or is there interest, to develop a national water strategy? **-**

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	YES	-
Mandated licensing of watercraft	YES	-
Mandated periodic safety inspections of watercraft	YES	-
Mandated licensing of the operator	YES	-
Individuals responsible for overall safety of watercraft	Operator	
Law against alcohol consumption and boating	YES	-
If yes, specify blood alcohol concentration limit: 0.15 mg per litre		
Law against drug use and boating	NO	-
Restrictions on watercraft passenger capacity	YES	-
Restrictions on watercraft load capacity	YES	-
Mandated provision of lifejackets on board watercraft	YES	-
Specific standard of lifejacket required	National standards exist	
Specific number of lifejackets required	YES	-

Watercraft often exempt from national maritime legislation:

**Complex exemptions exist in regard to vessel size, function, passenger capacity, engine wattage, and use on specified artificial ponds and waterways**

### CHILD SAFETY

Fencing to exclude children from swimming pools	-	-
Swimming lessons in school curricula	YES	-
Structured adult supervision of preschool children	-	-
Prosecution of neglect against children	-	-

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	-	-
Required competencies for lifeguards	-	-

### DISASTER RISK REDUCTION

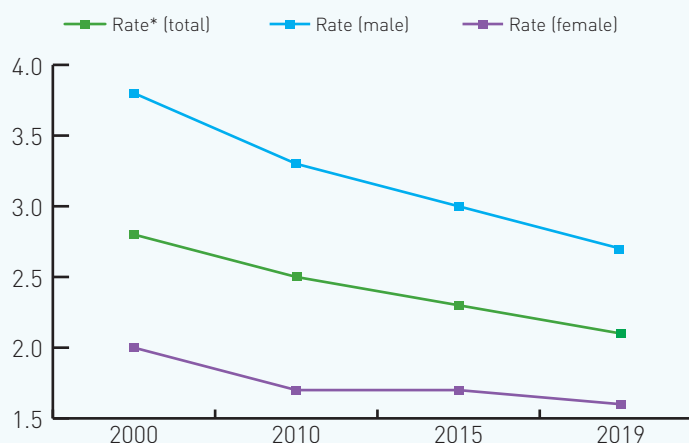
Private communication channels broadcast disaster warnings	-	-
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### DROWNING DATA

One agency maintains all vital registry statistics	-	-
--	---	---

- No response or not applicable

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate

# LAO PEOPLE'S DEMOCRATIC REPUBLIC

Population:  
7 169 455

Income group:  
Lower middle

Gross national  
income per capita:  
US\$ 2480 (2020)



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES THE LAO PEOPLE'S DEMOCRATIC REPUBLIC HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? **NO**

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Disaster risk reduction | Meteorology Department | Ministry of Transport | Ministry of National Defense | Ministry of Labor and Social Welfares | Ministry of Information, Culture and Tourism

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	-	-	-
Swim skills training	-	-	-
Childcare	-	-	-
Public awareness on drowning	-	-	-
Manage flood risks	●	-	-
Disaster warning systems	●	-	-
Public awareness on alcohol and swimming/boating	-	-	-
Rescue and resuscitation	●	-	-
Lifeguards	-	-	-
Search and rescue	●	-	-
Maritime safety	-	-	-
Media	●	-	-

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	-	-	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	-	-	-	-
Hospital emergency department data	-	-	-	-
Police	-	-	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured -  
Persons missing at sea are assumed to have died -  
Persons missing at sea are assumed to have drowned -

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL -

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES THE LAO PEOPLE'S DEMOCRATIC REPUBLIC HAVE A NATIONAL WATER SAFETY STRATEGY? **NO**

Are measurable targets to reduce drowning included? -  
If yes, please specify:

Do these strategies align with relevant SDGs? -

Are plans underway, or is there interest, to develop a national water strategy? YES

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	NO	-
Mandated licensing of watercraft	NO	-
Mandated periodic safety inspections of watercraft	NO	-
Mandated licensing of the operator	NO	-
Individuals responsible for overall safety of watercraft	-	-
Law against alcohol consumption and boating	NO	-
If yes, specify blood alcohol concentration limit:	-	-
Law against drug use and boating	NO	-
Restrictions on watercraft passenger capacity	NO	-
Restrictions on watercraft load capacity	NO	-
Mandated provision of lifejackets on board watercraft	NO	-
Specific standard of lifejacket required	-	-
Specific number of lifejackets required	NO	-

Watercraft often exempt from national maritime legislation:

### CHILD SAFETY

Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	NO	-
Prosecution of neglect against children	YES	-

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	-	-
Required competencies for lifeguards	NO	-

### DISASTER RISK REDUCTION

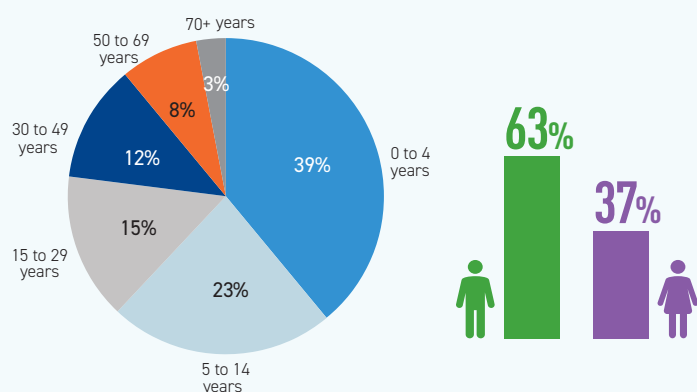
Private communication channels broadcast disaster warnings	NO	-
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### DROWNING DATA

One agency maintains all vital registry statistics	NO	-
--	----	---

- No response or not applicable

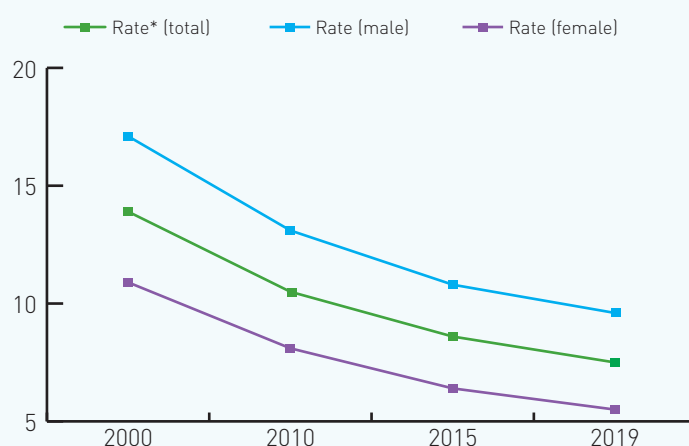
## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate

# MACAO SAR (CHINA)

Population:  
640 445

Income group:  
High

Gross national  
income per capita:  
US\$ 75 610 (2019)



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

**DOES MACAO SAR (CHINA) HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?** YES

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Disaster risk reduction | Meteorology Department | Maritime safety | Coastguard/Military | Fire Services Bureau | Tourist Office | Sports Bureau

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	HIGH	-
Swim skills training	●	HIGH	-
Childcare	●	LOW	-
Public awareness on drowning	●	MED	-
Manage flood risks	●	-	-
Disaster warning systems	●	HIGH	-
Public awareness on alcohol and swimming/boating	●	MED	-
Rescue and resuscitation	●	HIGH	-
Lifeguards	●	HIGH	-
Search and rescue	●	HIGH	-
Maritime safety	●	HIGH	YES
Media	●	HIGH	-

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	-	-	-	-
Hospital emergency department data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Police	-	-	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured YES  
Persons missing at sea are assumed to have died NO  
Persons missing at sea are assumed to have drowned NO

**PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL** -

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

**DOES MACAO SAR (CHINA) HAVE A NATIONAL WATER SAFETY STRATEGY?** NO

Are measurable targets to reduce drowning included? -  
If yes, please specify:  
Do these strategies align with relevant SDGs? -  
Are plans underway, or is there interest, to develop a national water strategy? -

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	YES	-
Mandated licensing of watercraft	YES	-
Mandated periodic safety inspections of watercraft	YES	-
Mandated licensing of the operator	YES	-
Individuals responsible for overall safety of watercraft	Owner/Operator	
Law against alcohol consumption and boating	NO	-
If yes, specify blood alcohol concentration limit:	-	-
Law against drug use and boating	NO	-
Restrictions on watercraft passenger capacity	YES	-
Restrictions on watercraft load capacity	YES	-
Mandated provision of lifejackets on board watercraft	YES	-
Specific standard of lifejacket required	National standard	
Specific number of lifejackets required	YES	-

Watercraft often exempt from national maritime legislation:

**Occasionally official vessels**

### CHILD SAFETY

Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	YES	-
Prosecution of neglect against children	YES	-

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	YES	-

### DISASTER RISK REDUCTION

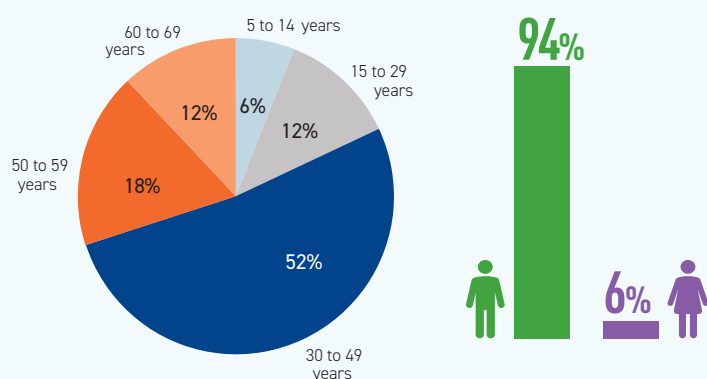
Private communication channels broadcast disaster warnings	-	-
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### DROWNING DATA

One agency maintains all vital registry statistics	NO	-
--	----	---

- No response or not applicable

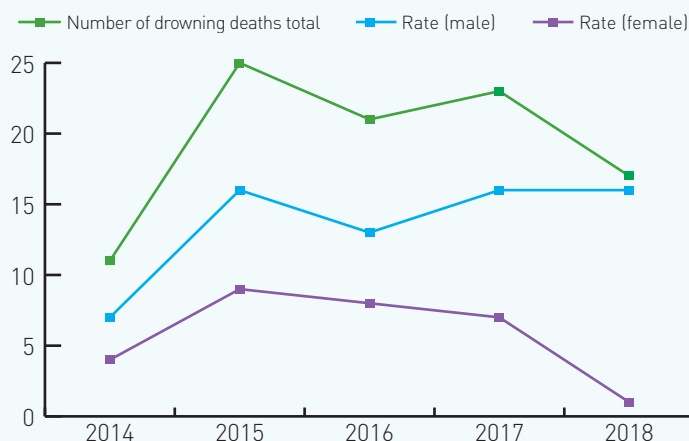
## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Data from Ministry of Health

<sup>b</sup> Data from Ministry of Health

## NUMBER OF DROWNING DEATHS OVER TIME<sup>b</sup>



\* rate = age-standardized death rate



MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES MALAYSIA HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? YES

SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Safe Kids Malaysia | Maritime safety | Ministry of Transport | Fire and Rescue Department | Coastguard | Disaster reduction

INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	MED	NO
Swim skills training	●	MED	NO
Childcare	●	MED	NO
Public awareness on drowning	●	MED	NO
Manage flood risks	●	HIGH	NO
Disaster warning systems	●	MED	NO
Public awareness on alcohol and swimming/boating		-	N/A
Rescue and resuscitation	●	MED	NO
Lifeguards		-	N/A
Search and rescue	●	HIGH	NO
Maritime safety	●	MED	NO
Media	●	LOW	NO

SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	●	■ ■ ■	●	■ ■ ■
Hospital emergency department data	●	■ ■ ■	●	■ ■ ■
Police	●	■ ■ ■	●	■ ■ ■ ■ ■
Transport sector	-	-	-	■ ■ ■ ■
Education sector	-	-	-	-
Maritime safety	●	■ ■ ■ ■ ■	-	-
Coastguard	-	-	●	■ ■ ■ ■ ■
Tourism sector	-	-	-	-
National community survey	●	■ ■ ■ ■ ■	-	-
Media	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured Yes

Persons missing at sea are assumed to have died NO

Persons missing at sea are assumed to have drowned NO

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL Not available

STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES MALAYSIA HAVE A NATIONAL WATER SAFETY STRATEGY? YES

Are measurable targets to reduce drowning included? NO

If yes, please specify:

Do these strategies align with relevant SDGs? NO

Are plans underway, or is there interest, to develop a national water strategy? -

LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	●	6
Mandated licensing of watercraft	●	6
Mandated periodic safety inspections of watercraft	●	6
Mandated licensing of the operator	●	6
Individuals responsible for overall safety of watercraft		
Law against alcohol consumption and boating	●	6
If yes, specify blood alcohol concentration limit:		
Law against drug use and boating	●	6
Restrictions on watercraft passenger capacity	YES	6
Restrictions on watercraft load capacity		6
Mandated provision of lifejackets on board watercraft	YES	6
Specific standard of lifejacket required	YES	
Specific number of lifejackets required	YES	6

Watercraft often exempt from national maritime legislation:  
Some exemptions exist to certain regulations, by state.

CHILD SAFETY		
Fencing to exclude children from swimming pools	NO	2
Swimming lessons in school curricula	YES	3
Structured adult supervision of preschool children	NO	2
Prosecution of neglect against children	YES	8

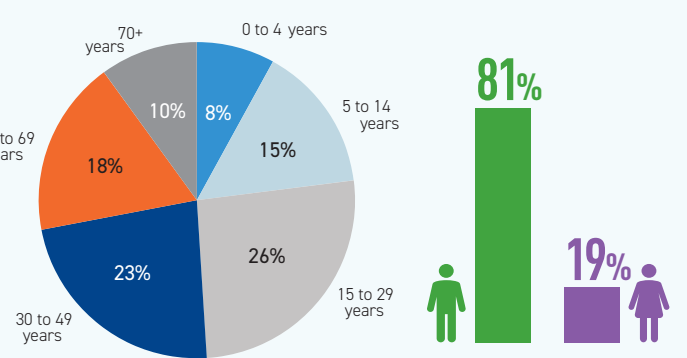
WATER SAFETY COMPETENCIES		
Required competencies for swimming instructors	YES	5
Required competencies for lifeguards	YES	5

DISASTER RISK REDUCTION		
Private communication channels broadcast disaster warnings	YES	2

DROWNING DATA		
One agency maintains all vital registry statistics	-	-

- No response or not applicable

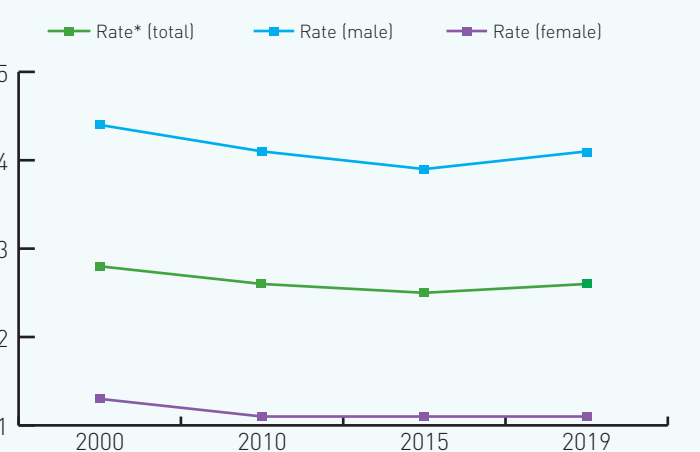
SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate

# MARSHALL ISLANDS

Population:  
58 791

Income group:  
Upper middle

Gross national  
income per capita:  
US\$ 5010 (2019)



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

**DOES THE MARSHALL ISLANDS HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?** **NO**

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Police | Disaster risk reduction | Ministry of Transport | Ports Authority | Red Cross | Trust Company of the Marshall Islands | Marshall Islands Shipping Corporation

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	-	-	-
Swim skills training	●	MED	-
Childcare	-	-	-
Public awareness on drowning	●	LOW	-
Manage flood risks	●	-	-
Disaster warning systems	●	MED	-
Public awareness on alcohol and swimming/boating	-	-	-
Rescue and resuscitation	●	MED	-
Lifeguards	-	-	-
Search and rescue	●	MED	-
Maritime safety	●	MED	-
Media	-	-	-

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Hospital emergency department data	-	-	-	-
Police	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Transport sector	-	-	●	■ ■ ■ ■ ■
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured YES  
Persons missing at sea are assumed to have died NO  
Persons missing at sea are assumed to have drowned NO

**PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL** -

## SHARE OF DROWNING DEATHS BY AGE GROUP

GHE data not available

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

**DOES THE MARSHALL ISLANDS HAVE A NATIONAL WATER SAFETY STRATEGY?** **NO**

Are measurable targets to reduce drowning included? -  
If yes, please specify:

Do these strategies align with relevant SDGs? -

Are plans underway, or is there interest, to develop a national water strategy? -

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	●	6
Mandated licensing of watercraft	YES	●	6
Mandated periodic safety inspections of watercraft	YES	●	3
Mandated licensing of the operator	YES	●	9
Individuals responsible for overall safety of watercraft		Operator	
Law against alcohol consumption and boating	YES	-	-
If yes, specify blood alcohol concentration limit:	-	-	-
Law against drug use and boating	NO	-	-
Restrictions on watercraft passenger capacity	YES	●	8
Restrictions on watercraft load capacity	YES	●	8
Mandated provision of lifejackets on board watercraft	YES	●	8
Specific standard of lifejacket required		SOLAS	
Specific number of lifejackets required	YES	●	8

Watercraft often exempt from national maritime legislation:

**Vessels measuring less than 12 metres in length**

### CHILD SAFETY

Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	NO	-
Prosecution of neglect against children	YES	● 7

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	NO	-

### DISASTER RISK REDUCTION

Private communication channels broadcast disaster warnings	YES	● 6
--	-----	-----

### DROWNING DATA

One agency maintains all vital registry statistics	NO	-
--	----	---

- No response or not applicable

## RATE OF DROWNING DEATHS

GHE data not available

MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES MONGOLIA HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? NO

SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Disaster risk reduction | Meteorology Department | Ministry of Transport | Maritime safety | Coastguard/Military | National Statistics Office | Ministry of Environment and Tourism | Local administrations | State Specialized Inspection Agency | Ministry of Labor and Social Protection

INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	-	-	-
Swim skills training	-	-	-
Childcare	-	-	-
Public awareness on drowning	●	-	NO
Manage flood risks	-	-	-
Disaster warning systems	●	-	YES
Public awareness on alcohol and swimming/boating	●	-	NO
Rescue and resuscitation	●	-	NO
Lifeguards	-	-	-
Search and rescue	●	-	YES
Maritime safety	-	-	-
Media	●	-	YES

SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	●	■ ■ ■ ■ ■	N/A	-
Hospital admission data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Hospital emergency department data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Police	●	■ ■ ■ ■ ■	-	-
Transport sector	●	■ ■ ■ ■ ■	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured YES  
Persons missing at sea are assumed to have died NO  
Persons missing at sea are assumed to have drowned NO

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL 21.9%

STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES MONGOLIA HAVE A NATIONAL WATER SAFETY STRATEGY? YES

Are measurable targets to reduce drowning included? YES  
If yes, please specify:  
Do these strategies align with relevant SDGs? YES  
Are plans underway, or is there interest, to develop a national water strategy? -

LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	<div><div></div></div> 10	
Mandated licensing of watercraft	YES	<div><div></div></div> 10	
Mandated periodic safety inspections of watercraft	YES	<div><div></div></div> 9	
Mandated licensing of the operator	NO	-	
Individuals responsible for overall safety of watercraft		-	
Law against alcohol consumption and boating	YES	<div><div></div></div> 10	
If yes, specify blood alcohol concentration limit:	None		
Law against drug use and boating	YES	<div><div></div></div> 10	
Restrictions on watercraft passenger capacity	YES	-	
Restrictions on watercraft load capacity	NO	-	
Mandated provision of lifejackets on board watercraft	YES	<div><div></div></div> 7	
Specific standard of lifejacket required		EN ISO 12404	
Specific number of lifejackets required	YES	<div><div></div></div> 10	

Watercraft often exempt from national maritime legislation:  
**Personal boats with a length not exceeding 3 metres and an engine capacity of less than 10 horsepower**

CHILD SAFETY

Fencing to exclude children from swimming pools	-	-
Swimming lessons in school curricula	YES	-
Structured adult supervision of preschool children	YES	5
Prosecution of neglect against children	YES	4

WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	YES	-
Required competencies for lifeguards	YES	-

DISASTER RISK REDUCTION

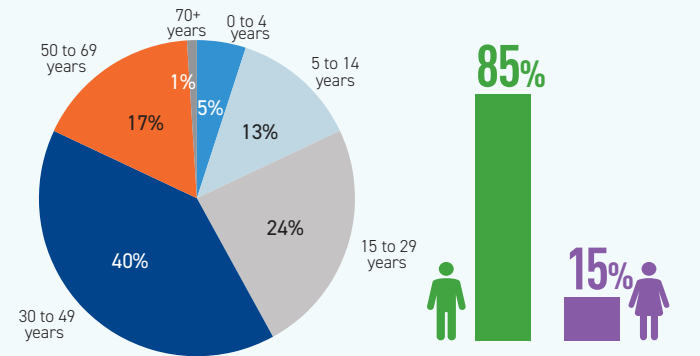
Private communication channels broadcast disaster warnings	YES	10
--	-----	----

DROWNING DATA

One agency maintains all vital registry statistics	YES	10
--	-----	----

- No response or not applicable

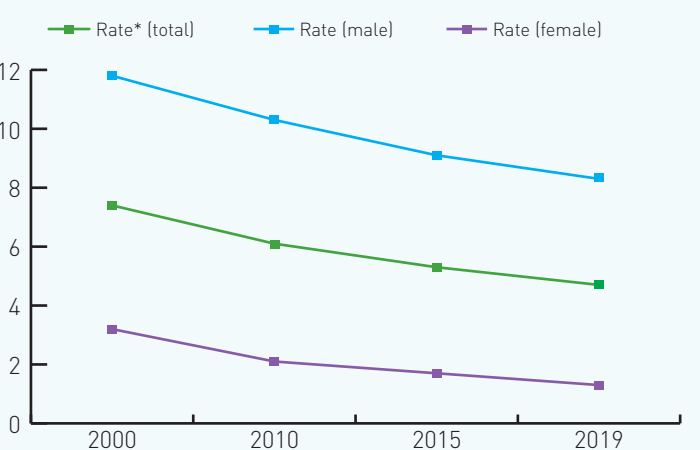
SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate



# NEW ZEALAND

Population:  
4 917 000

Income group:  
High

Gross national  
income per capita:  
US\$ 42 450 (2019)



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES NEW ZEALAND HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?

NO

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Disaster risk reduction | Ministry of Transport | Maritime safety | Coastguard/Military | Water Safety New Zealand | Accident Compensation Corporation | Surf Life Saving NZ | Sport NZ

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	HIGH	YES
Swim skills training	●	HIGH	YES
Childcare	●	HIGH	YES
Public awareness on drowning	●	HIGH	YES
Manage flood risks	●	HIGH	YES
Disaster warning systems	●	HIGH	YES
Public awareness on alcohol and swimming/boating	●	HIGH	YES
Rescue and resuscitation	●	MED	-
Lifeguards	●	HIGH	YES
Search and rescue	●	HIGH	NO
Maritime safety	●	HIGH	NO
Media	●	HIGH	YES

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Hospital emergency department data	-	-	-	-
Police	●	■ ■ ■ ■ ■	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	●	■ ■ ■ ■ ■	-	-
Coastguard	●	■ ■	●	■ ■
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are capturedYES

Persons missing at sea are assumed to have diedYES

Persons missing at sea are assumed to have drownedNO

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL

15%

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES NEW ZEALAND HAVE A NATIONAL WATER SAFETY STRATEGY?

YES

Are measurable targets to reduce drowning included?

YES

If yes, please specify:  
**Reduce per-capita preventable drowning deaths using a five-year rolling average of 25% by 2025. Per-capita fatalities are targeted to move from 1.59 to 1.19 by 2025.**  
**Reduce per-capita preventable drowning-related hospitalizations using a five-year rolling average of 12% by 2025. Per-capita hospitalizations are targeted to move from 3.7 to 3.25 by 2025.**

Do these strategies align with relevant SDGs?

NO

Are plans underway, or is there interest, to develop a national water strategy?

-

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY	ENFORCEMENT	
	LIMITED	MAXIMUM
Mandated registration of watercraft	YES	-
Mandated licensing of watercraft	YES	-
Mandated periodic safety inspections of watercraft	YES	-
Mandated licensing of the operator	YES	-
Individuals responsible for overall safety of watercraft	Owner/Operator/Crew/ Recognized surveyors	
Law against alcohol consumption and boating	YES	-
If yes, specify blood alcohol concentration limit: 50 mg per 100 millilitres		
Law against drug use and boating	NO	-
Restrictions on watercraft passenger capacity	YES	-
Restrictions on watercraft load capacity	YES	-
Mandated provision of lifejackets on board watercraft	YES	-
Specific standard of lifejacket required	National standards exist	
Specific number of lifejackets required	YES	-

Watercraft often exempt from national maritime legislation:  
**Complex exemptions exist dependant on vessel function, area of operation and specific circumstances of vessel use.**

## CHILD SAFETY

Fencing to exclude children from swimming pools	YES	-
Swimming lessons in school curricula	YES	-
Structured adult supervision of preschool children	YES	-
Prosecution of neglect against children	YES	-

## WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	NO	-

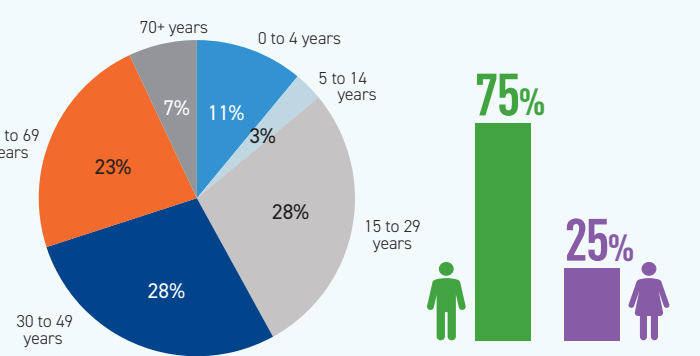
## DISASTER RISK REDUCTION

Private communication channels broadcast disaster warnings	YES	-
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## DROWNING DATA

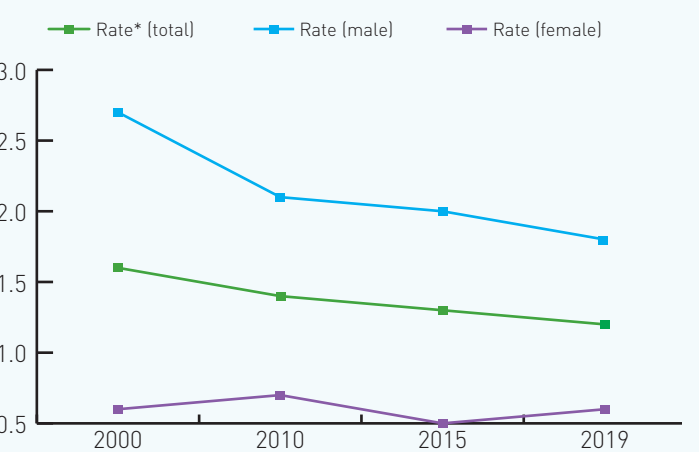
One agency maintains all vital registry statistics	YES	-
- No response or not applicable		

## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019  
<sup>b</sup> GHE data, 2000–2019  
National Drowning Reports developed by Water Safety New Zealand available: <https://watersafety.org.nz/drowning%20statistics>

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate

MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES PALAU HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? NO

SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police |  
National Emergency Management Office | Marine law enforcement |  
Ministry of Tourism | Red Cross | Koror (State) Rangers | Palau Swimming Association

INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	-	-	-
Swim skills training	●	MED	-
Childcare	●	HIGH	-
Public awareness on drowning	●	HIGH	-
Manage flood risks	-	-	-
Disaster warning systems	●	HIGH	-
Public awareness on alcohol and swimming/boating	-	-	-
Rescue and resuscitation	●	MED	-
Lifeguards	-	-	-
Search and rescue	●	HIGH	-
Maritime safety	●	HIGH	-
Media	-	-	-

SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Hospital emergency department data	-	-	-	-
Police	-	-	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured NO  
Persons missing at sea are assumed to have died NO  
Persons missing at sea are assumed to have drowned NO

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL -

STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES PALAU HAVE A NATIONAL WATER SAFETY STRATEGY? NO

Are measurable targets to reduce drowning included? -  
If yes, please specify:  
Do these strategies align with relevant SDGs? -  
Are plans underway, or is there interest, to develop a national water strategy? YES

LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	5	
Mandated licensing of watercraft	YES	5	
Mandated periodic safety inspections of watercraft	YES	8	
Mandated licensing of the operator	YES	10	
Individuals responsible for overall safety of watercraft	Owner/Operator/Crew		
Law against alcohol consumption and boating	YES	-	
If yes, specify blood alcohol concentration limit:	0.1 mg	1	
Law against drug use and boating	YES	0	
Restrictions on watercraft passenger capacity	YES	10	
Restrictions on watercraft load capacity	YES	10	
Mandated provision of lifejackets on board watercraft	YES	10	
Specific standard of lifejacket required	EN ISO 12402		
Specific number of lifejackets required	YES	7	

Watercraft often exempt from national maritime legislation:

Vessels that are not propelled by mechanical systems.

CHILD SAFETY	
Fencing to exclude children from swimming pools	NO -
Swimming lessons in school curricula	NO -
Structured adult supervision of preschool children	YES 6
Prosecution of neglect against children	YES 10

WATER SAFETY COMPETENCIES	
Required competencies for swimming instructors	NO -
Required competencies for lifeguards	NO -

DISASTER RISK REDUCTION	
Private communication channels broadcast disaster warnings	YES 10

DROWNING DATA	
One agency maintains all vital registry statistics	NO -

- No response or not applicable

SHARE OF DROWNING DEATHS BY AGE GROUP

GHE data not available

RATE OF DROWNING DEATHS

GHE data not available

# PAPUA NEW GUINEA

Population:  
8 776 109

Income group:  
Lower middle

Gross national  
income per capita:  
US\$ 2660 (2020)



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

**DOES PAPUA NEW GUINEA HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?** NO

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | National Disaster Centre | Meteorology Department | Ministry of Transport | Maritime safety | National Statistics Office | National Research Institute | Department of Mineral Policy and Geohazards Management | Courts | Community development | Civil registry | St Johns Ambulance | National Broadcasting Corporation

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	LOW	NO
Swim skills training	●	LOW	NO
Childcare	●	LOW	-
Public awareness on drowning	●	LOW	NO
Manage flood risks	●	HIGH	YES
Disaster warning systems	●	MED	YES
Public awareness on alcohol and swimming/boating	●	MED	NO
Rescue and resuscitation	●	LOW	-
Lifeguards	●	LOW	-
Search and rescue	●	HIGH	NO
Maritime safety	●	HIGH	NO
Media	-	-	-

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	●	■ ■ ■ ■ ■	N/A	-
Hospital admission data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Hospital emergency department data	-	-	-	-
Police	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	●	■ ■ ■ ■ ■	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	●	■ ■ ■	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured NO  
Persons missing at sea are assumed to have died NO  
Persons missing at sea are assumed to have drowned NO

**PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL** -

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

**DOES PAPUA NEW GUINEA HAVE A NATIONAL WATER SAFETY STRATEGY?** NO

Are measurable targets to reduce drowning included? -  
If yes, please specify:

Do these strategies align with relevant SDGs? -

Are plans underway, or is there interest, to develop a national water strategy? YES

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	4	
Mandated licensing of watercraft	YES	4	
Mandated periodic safety inspections of watercraft	YES	2	
Mandated licensing of the operator	YES	6	
Individuals responsible for overall safety of watercraft	Owner/Operator/Passengers		
Law against alcohol consumption and boating	YES	6	
If yes, specify blood alcohol concentration limit: Not specified			
Law against drug use and boating	NO	-	
Restrictions on watercraft passenger capacity	NO	-	
Restrictions on watercraft load capacity	YES	7	
Mandated provision of lifejackets on board watercraft	YES	2	
Specific standard of lifejacket required	Australian design standards		
Specific number of lifejackets required	YES	7	

Watercraft often exempt from national maritime legislation:

**Vessels of traditional build, naval craft and some international vessels.**

### CHILD SAFETY

Fencing to exclude children from swimming pools	YES	1
Swimming lessons in school curricula	YES	7
Structured adult supervision of preschool children	NO	-
Prosecution of neglect against children	YES	7

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	NO	-

### DISASTER RISK REDUCTION

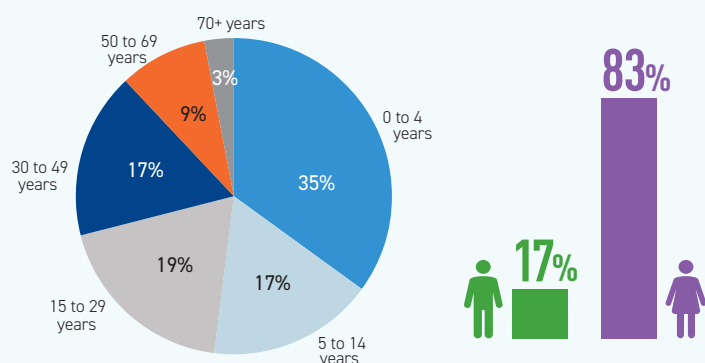
Private communication channels broadcast disaster warnings	YES	8
--	-----	---

### DROWNING DATA

One agency maintains all vital registry statistics	YES	1
--	-----	---

- No response or not applicable

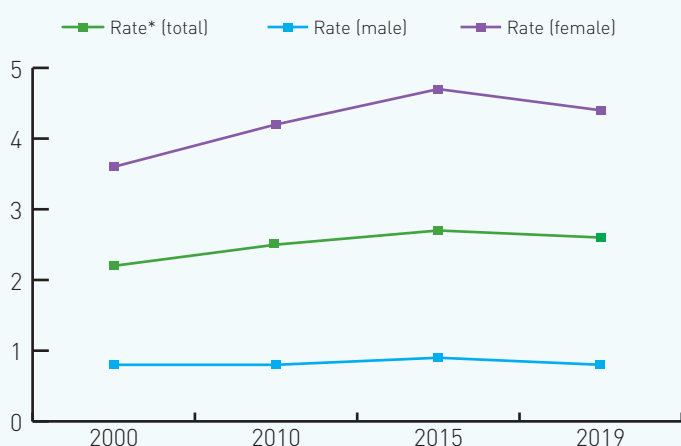
## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate




# PHILIPPINES

Population:  
108 116 615

Income group:  
Lower middle

Gross national  
income per capita:  
US\$ 3430 (2020)



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES THE PHILIPPINES HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?

YES

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | National Disaster risk reduction and Management Council | Ministry of Transport | MARINA | Coastguard | Philippine Statistics Authority | Red Cross | College of Emergency Medicine | Philippine Information Agency | SafeKids | Philippines Life Saving Society | Council for the Welfare of Children | Department of Labor and Employment

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	<div></div>	LOW	NO
Swim skills training	<div></div>	LOW	NO
Childcare	<div></div>	LOW	NO
Public awareness on drowning	<div></div>	MED	NO
Manage flood risks	<div></div>	MED	YES
Disaster warning systems	<div></div>	HIGH	YES
Public awareness on alcohol and swimming/boating	<div></div>	LOW	NO
Rescue and resuscitation	<div></div>	MED	NO
Lifeguards	<div></div>	LOW	NO
Search and rescue	<div></div>	HIGH	YES
Maritime safety	<div></div>	HIGH	NO
Media	<div></div>	LOW	NO

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	<div></div>	<div></div>	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	<div></div>	<div></div>	<div></div>	<div></div>
Hospital emergency department data	-	-	-	-
Police	<div></div>	<div></div>	<div></div>	<div></div>
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	<div></div>	<div></div>	<div></div>	<div></div>
Coastguard	<div></div>	<div></div>	<div></div>	<div></div>
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

Age

Sex

Type of drowning event

Activity

Water body

Drowning deaths in community settings are captured

Persons missing at sea are assumed to have died

Persons missing at sea are assumed to have drowned

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL

13%

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES THE PHILIPPINES HAVE A NATIONAL WATER SAFETY STRATEGY?

YES

Are measurable targets to reduce drowning included?

YES

If yes, please specify:  
To reduce drowning mortality in the Philippines by 50% by the year 2026.

Do these strategies align with relevant SDGs?

YES

Are plans underway, or is there interest, to develop a national water strategy?

-

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	<div></div>	8
Mandated licensing of watercraft	YES	<div></div>	8
Mandated periodic safety inspections of watercraft	YES	<div></div>	8
Mandated licensing of the operator	YES	<div></div>	7
Individuals responsible for overall safety of watercraft	Owner/Operator/Crew		
Law against alcohol consumption and boating	YES	<div></div>	8
If yes, specify blood alcohol concentration limit: Not specified			
Law against drug use and boating	YES	<div></div>	-
Restrictions on watercraft passenger capacity	YES	<div></div>	9
Restrictions on watercraft load capacity	YES	<div></div>	7
Mandated provision of lifejackets on board watercraft	YES	<div></div>	9
Specific standard of lifejacket required	SOLAS		
Specific number of lifejackets required	YES	<div></div>	10

Watercraft often exempt from national maritime legislation:

At times, vessels owned by government including warships and naval ships.

## CHILD SAFETY

Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	YES	9
Prosecution of neglect against children	YES	8

## WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	NO	-

## DISASTER RISK REDUCTION

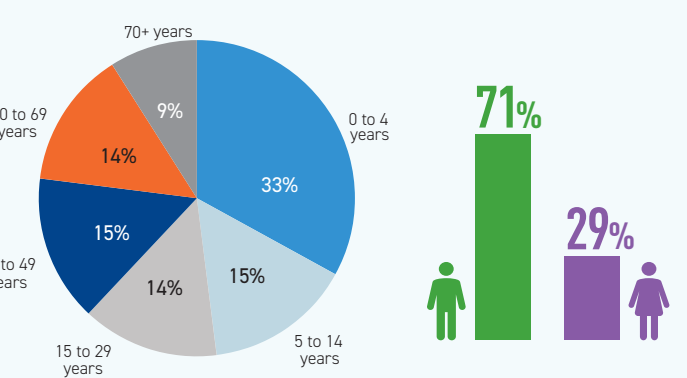
Private communication channels broadcast disaster warnings	YES	10
--	-----	----

## DROWNING DATA

One agency maintains all vital registry statistics	YES	9
--	-----	---

- No response or not applicable

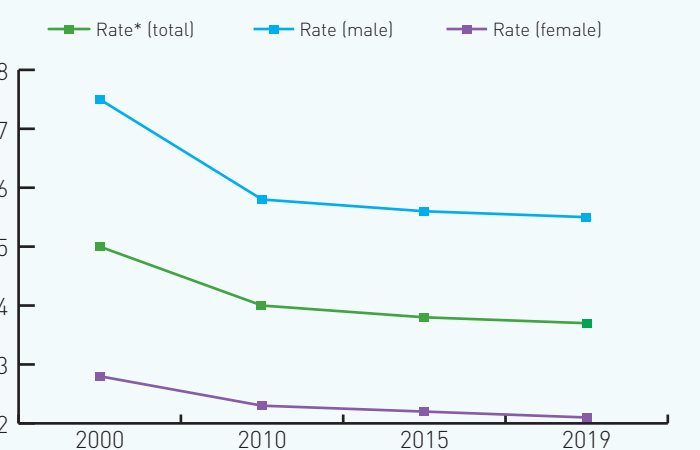
## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2009–2019

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

**DOES SAMOA HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?** NO

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Ministry of Natural Resources and Environment | Fire and Emergency Services Authority | Ministry of Works and Transport Infrastructure | Bureau of Statistics | Samoa Shipping Services | Ministry of Women and Community development | Attorney General's Office | Accident Compensation Corporation | Red Cross | Samoa Tourism Authority | Samoa Shipping Corporation

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	-	-	-
Swim skills training	-	-	-
Childcare	-	-	-
Public awareness on drowning	-	-	-
Manage flood risks	●	MED	-
Disaster warning systems	●	MED	-
Public awareness on alcohol and swimming/boating	●	MED	-
Rescue and resuscitation	●	MED	-
Lifeguards	-	-	-
Search and rescue	●	MED	-
Maritime safety	●	MED	-
Media	●	MED	-

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	●	■ ■ ■ ■	●	■ ■ ■ ■
Hospital emergency department data	●	■ ■ ■ ■	●	■ ■ ■ ■
Police	●	■ ■ ■ ■ ■ ■	●	■ ■ ■ ■
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured YES  
Persons missing at sea are assumed to have died NO  
Persons missing at sea are assumed to have drowned NO

**PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL** -

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

**DOES SAMOA HAVE A NATIONAL WATER SAFETY STRATEGY?** NO

Are measurable targets to reduce drowning included? -  
If yes, please specify: -  
Do these strategies align with relevant SDGs? -  
Are plans underway, or is there interest, to develop a national water strategy? NO

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	5	
Mandated licensing of watercraft	YES	5	
Mandated periodic safety inspections of watercraft	YES	5	
Mandated licensing of the operator	YES	5	
Individuals responsible for overall safety of watercraft	Owner/Operator/Crew		
Law against alcohol consumption and boating	YES	5	
If yes, specify blood alcohol concentration limit:	Not specified		
Law against drug use and boating	YES	5	
Restrictions on watercraft passenger capacity	YES	5	
Restrictions on watercraft load capacity	YES	5	
Mandated provision of lifejackets on board watercraft	YES	5	
Specific standard of lifejacket required	EN ISO 12402, USCG		
Specific number of lifejackets required	YES	5	

Watercraft often exempt from national maritime legislation:

**Vessels less than 15 metres in length (including small recreational crafts and canoes) and warships.**

### CHILD SAFETY

Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	NO	-
Prosecution of neglect against children	YES	5

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	NO	-

### DISASTER RISK REDUCTION

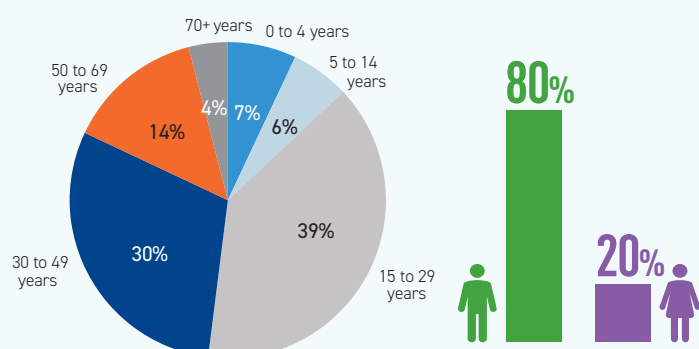
Private communication channels broadcast disaster warnings	YES	5
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### DROWNING DATA

One agency maintains all vital registry statistics	NO	-
--	----	---

- No response or not applicable

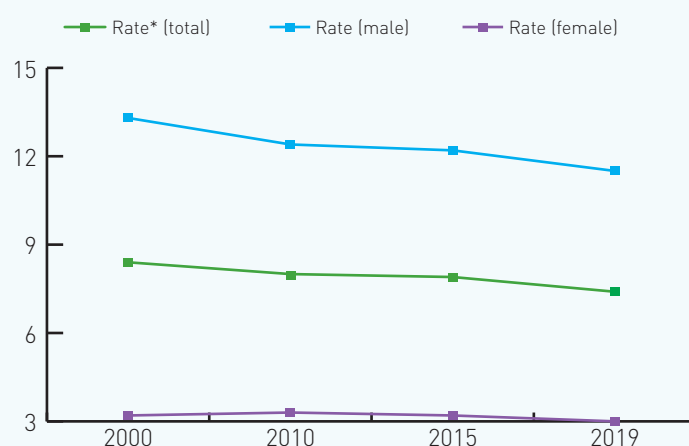
## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate

# SOLOMON ISLANDS

Population:  
345 281

Income group:  
Lower middle

Gross national  
income per capita:  
US\$ 2300 (2020)



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

**DOES SOLOMON ISLANDS HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?** NO

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Disaster risk reduction | Meteorology Department | Maritime safety | Maritime Rescue Co-ordination Centre | Forum Fisheries Agency

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	-	-	-
Swim skills training	●	-	-
Childcare	-	-	-
Public awareness on drowning	-	-	-
Manage flood risks	●	-	-
Disaster warning systems	●	-	-
Public awareness on alcohol and swimming/boating	●	LOW	-
Rescue and resuscitation	-	-	-
Lifeguards	-	-	-
Search and rescue	●	MED	-
Maritime safety	●	HIGH	-
Media	-	-	-

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	-	-	-	-
Hospital emergency department data	-	-	-	-
Police	-	-	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	●	■ ■ ■	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured YES  
Persons missing at sea are assumed to have died NO  
Persons missing at sea are assumed to have drowned NO

**PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL** -

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

**DOES SOLOMON ISLANDS HAVE A NATIONAL WATER SAFETY STRATEGY?** NO

Are measurable targets to reduce drowning included? -  
If yes, please specify:

Do these strategies align with relevant SDGs? -

Are plans underway, or is there interest, to develop a national water strategy? -

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	●	10
Mandated licensing of watercraft	YES	●	10
Mandated periodic safety inspections of watercraft	YES	●	8
Mandated licensing of the operator	YES	●	10
Individuals responsible for overall safety of watercraft	Owner/Operator		
Law against alcohol consumption and boating	YES	●	7
If yes, specify blood alcohol concentration limit: Not specified			
Law against drug use and boating	YES	●	7
Restrictions on watercraft passenger capacity	YES	●	9
Restrictions on watercraft load capacity	YES	●	9
Mandated provision of lifejackets on board watercraft	YES	●	10
Specific standard of lifejacket required	SOLAS		
Specific number of lifejackets required	YES	●	10

Watercraft often exempt from national maritime legislation:

**Watercraft less than 10 metres in length, pleasure craft. Traditional vessels or warship/patrol vessels.**

### CHILD SAFETY

Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	NO	-
Prosecution of neglect against children	YES	-

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	-	-
Required competencies for lifeguards	-	-

### DISASTER RISK REDUCTION

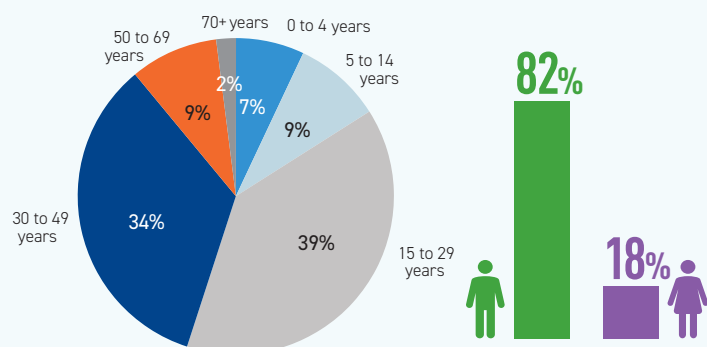
Private communication channels broadcast disaster warnings	YES	-
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### DROWNING DATA

One agency maintains all vital registry statistics	NO	-
--	----	---

- No response or not applicable

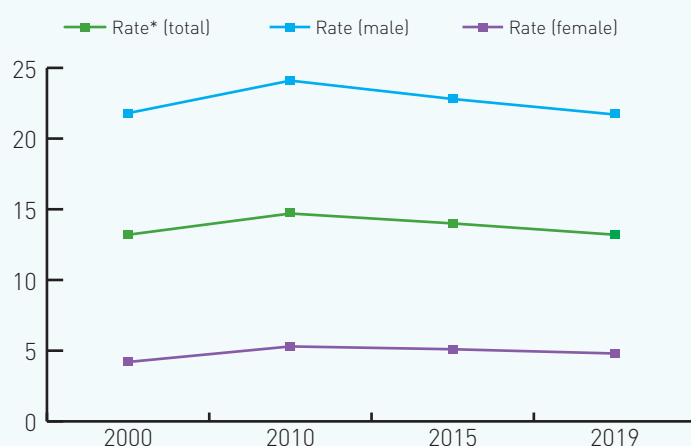
## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

**DOES TONGA HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?** YES

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Police | National Emergency Management Office | Meteorology Department | Marine and ports | Defence | Ministry of Internal Affairs | Ministry of Fisheries | Fire and emergency services

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	-	-	-
Swim skills training	●	MED	-
Childcare	-	-	-
Public awareness on drowning	●	HIGH	-
Manage flood risks	-	-	-
Disaster warning systems	●	HIGH	-
Public awareness on alcohol and swimming/boating	●	HIGH	-
Rescue and resuscitation	●	MED	-
Lifeguards	-	-	-
Search and rescue	●	HIGH	-
Maritime safety	●	HIGH	-
Media	-	-	-

## SOURCES OF DROWNING DATA

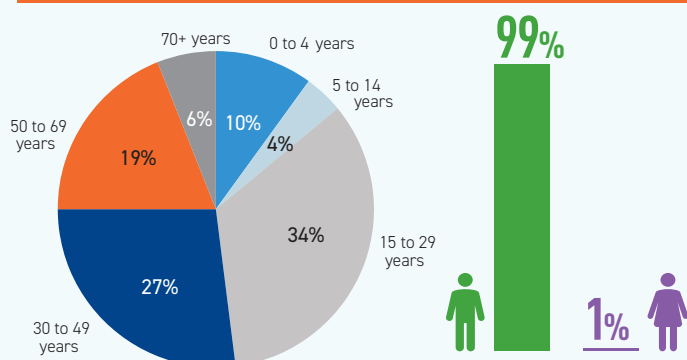
SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	●	■ ■ ■	-	-
Hospital emergency department data	-	-	-	-
Police	●	■ ■ ■	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	●	■ ■ ■	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	-	-	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured NO  
Persons missing at sea are assumed to have died YES  
Persons missing at sea are assumed to have drowned NO

**PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL** -

## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

**DOES TONGA HAVE A NATIONAL WATER SAFETY STRATEGY?** NO

Are measurable targets to reduce drowning included? -  
If yes, please specify:

Do these strategies align with relevant SDGs? -

Are plans underway, or is there interest, to develop a national water strategy? YES

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	●	8
Mandated licensing of watercraft	YES	●	8
Mandated periodic safety inspections of watercraft	YES	●	10
Mandated licensing of the operator	YES	●	10
Individuals responsible for overall safety of watercraft	Owner/Operator/Crew		
Law against alcohol consumption and boating	YES	●	7
If yes, specify blood alcohol concentration limit: Not specified			
Law against drug use and boating	NO	-	-
Restrictions on watercraft passenger capacity	YES	●	8
Restrictions on watercraft load capacity	YES	●	8
Mandated provision of lifejackets on board watercraft	YES	●	9
Specific standard of lifejacket required	NO	-	-
Specific number of lifejackets required	YES	●	9

Watercraft often exempt from national maritime legislation:  
**Watercraft less than 8 metres in length that are not used for commercial purposes.**

### CHILD SAFETY

Fencing to exclude children from swimming pools	NO	-
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	NO	-
Prosecution of neglect against children	YES	7

### WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	NO	-

### DISASTER RISK REDUCTION

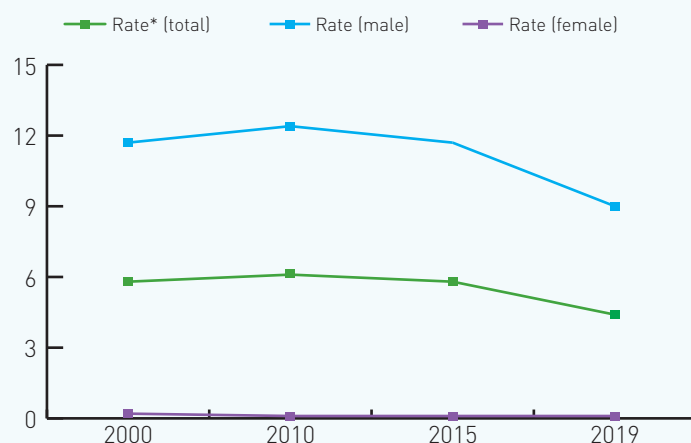
Private communication channels broadcast disaster warnings	NO	-
--	----	---

### DROWNING DATA

One agency maintains all vital registry statistics	NO	-
--	----	---

- No response or not applicable

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate



## MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

**DOES VANUATU HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION?** YES

### SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Disaster risk reduction | Ministry of Transport, Public Utilities and Infrastructure | Office of Maritime Regulator | Coastguard/Military | Ministry of Climate Change | Vanuatu Broadcasting and Television Corporation | Ministry of Justice

## INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	MED	NO
Swim skills training	●	MED	NO
Childcare	●	MED	NO
Public awareness on drowning	●	LOW	NO
Manage flood risks	●	HIGH	NO
Disaster warning systems	●	HIGH	YES
Public awareness on alcohol and swimming/boating	●	HIGH	NO
Rescue and resuscitation	●	MED	NO
Lifeguards	●	LOW	NO
Search and rescue	●	HIGH	NO
Maritime safety	●	HIGH	YES
Media	●	MED	NO

## SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	-	-	N/A	-
Hospital admission data	●	■ ■ ■ ■ ■	-	-
Hospital emergency department data	●	■ ■ ■ ■ ■	-	-
Police	●	■ ■ ■ ■ ■	-	-
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	●	■ ■ ■ ■ ■	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	-	-	-	-
Media	●	■ ■ ■ ■ ■	-	-

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured YES  
Persons missing at sea are assumed to have died NO  
Persons missing at sea are assumed to have drowned NO

**PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL** -

## STRATEGY AND TARGETS FOR DROWNING PREVENTION

**DOES VANUATU HAVE A NATIONAL WATER SAFETY STRATEGY?** YES

Are measurable targets to reduce drowning included? NO  
If yes, please specify:

Do these strategies align with relevant SDGs? YES

Are plans underway, or is there interest, to develop a national water strategy? -

## LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	7	
Mandated licensing of watercraft	YES	7	
Mandated periodic safety inspections of watercraft	YES	7	
Mandated licensing of the operator	YES	7	
Individuals responsible for overall safety of watercraft	Owner/Operator/Crew		
Law against alcohol consumption and boating	YES	7	
If yes, specify blood alcohol concentration limit: Not specified			
Law against drug use and boating	YES	7	
Restrictions on watercraft passenger capacity	YES	8	
Restrictions on watercraft load capacity	YES	7	
Mandated provision of lifejackets on board watercraft	YES	7	
Specific standard of lifejacket required	National standard		
Specific number of lifejackets required	YES	7	

Watercraft often exempt from national maritime legislation:

None

## CHILD SAFETY

Fencing to exclude children from swimming pools	YES	7
Swimming lessons in school curricula	NO	-
Structured adult supervision of preschool children	YES	5
Prosecution of neglect against children	YES	2

## WATER SAFETY COMPETENCIES

Required competencies for swimming instructors	NO	-
Required competencies for lifeguards	NO	-

## DISASTER RISK REDUCTION

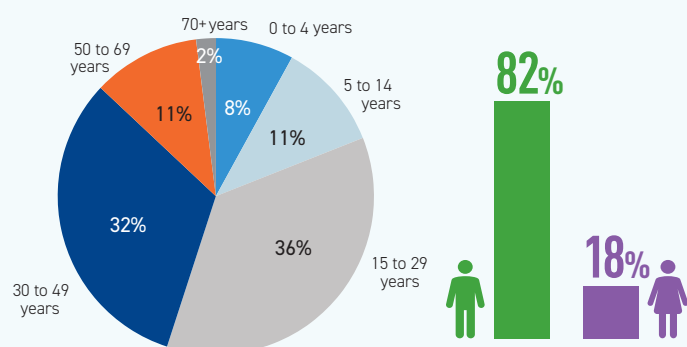
Private communication channels broadcast disaster warnings	YES	2
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## DROWNING DATA

One agency maintains all vital registry statistics	NO	-
--	----	---

- No response or not applicable

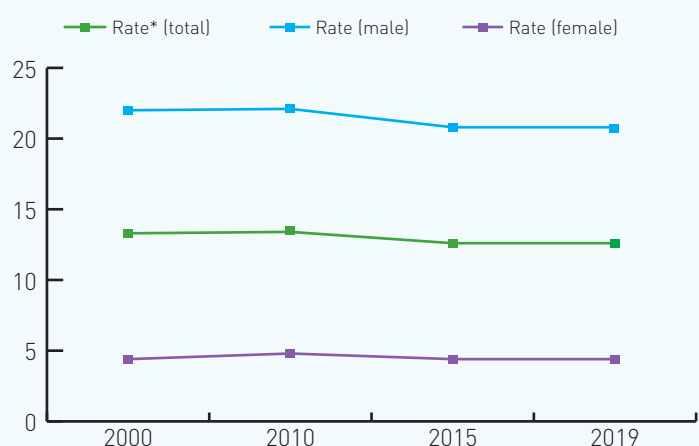
## SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019

<sup>b</sup> GHE data, 2000–2019

## RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate

MANAGEMENT AND COORDINATION OF DROWNING PREVENTION

DOES VIET NAM HAVE A NATIONAL COORDINATION MECHANISM FOR DROWNING PREVENTION? YES

SELECTED SECTORS AND AGENCIES INVOLVED IN DROWNING PREVENTION:

Ministry of Health | Ministry of Education | Police | Disaster risk reduction | Ministry of Transport | Maritime safety | Coastguard/Military | Ministry of Labour, Invalids and Social Affairs | Ministry of Culture, Sports and Tourism

INTERVENTIONS FOR DROWNING PREVENTION

	AVAILABLE	COVERAGE	EVALUATED
Physical barriers	●	HIGH	YES
Swim skills training	●	MED	YES
Childcare	●	HIGH	YES
Public awareness on drowning	●	HIGH	YES
Manage flood risks	●	MED	YES
Disaster warning systems	●	MED	YES
Public awareness on alcohol and swimming/boating	●	MED	YES
Rescue and resuscitation	●	MED	YES
Lifeguards	●	HIGH	YES
Search and rescue	●	HIGH	YES
Maritime safety	●	HIGH	YES
Media	●	HIGH	YES

SOURCES OF DROWNING DATA

SOURCE OF DATA	TYPE OF DROWNING CAPTURED			
	FATAL	INFORMATION COLLECTED*	NON-FATAL	INFORMATION COLLECTED*
Vital registry	●	■ ■ ■ ■ ■	N/A	-
Verbal autopsy	●	■ ■ ■ ■ ■	N/A	-
Hospital admission data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Hospital emergency department data	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Police	-	-	●	■ ■ ■ ■ ■
Transport sector	-	-	-	-
Education sector	-	-	-	-
Maritime safety	-	-	-	-
Coastguard	-	-	-	-
Tourism sector	-	-	-	-
National community survey	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■
Media	●	■ ■ ■ ■ ■	●	■ ■ ■ ■ ■

■ Age ■ Sex ■ Type of drowning event ■ Activity ■ Water body

Drowning deaths in community settings are captured YES

Persons missing at sea are assumed to have died NO

Persons missing at sea are assumed to have drowned NO

PROPORTION OF DROWNING DEATHS ASSOCIATED WITH ALCOHOL -

STRATEGY AND TARGETS FOR DROWNING PREVENTION

DOES VIET NAM HAVE A NATIONAL WATER SAFETY STRATEGY? YES

Are measurable targets to reduce drowning included? YES

If yes, please specify:  
**The Program on Child Injury Prevention and Control for the Period of 2021–2030 aims to reduce drowning mortality among children by 10% between 2020 to 2025.**

Do these strategies align with relevant SDGs? YES

Are plans underway, or is there interest, to develop a national water strategy? -

LEGISLATION AND REGULATION FOR DROWNING PREVENTION

MARITIME SAFETY		ENFORCEMENT	
		LIMITED	MAXIMUM
Mandated registration of watercraft	YES	●	8
Mandated licensing of watercraft	YES	●	8
Mandated periodic safety inspections of watercraft	YES	●	8
Mandated licensing of the operator	YES	●	8
Individuals responsible for overall safety of watercraft	Owner/Operator		
Law against alcohol consumption and boating	YES	●	8
If yes, specify blood alcohol concentration limit: Alcohol content > 50 mg per 100 ml of blood			
Law against drug use and boating	YES	●	8
Restrictions on watercraft passenger capacity	YES	●	8
Restrictions on watercraft load capacity	YES	●	8
Mandated provision of lifejackets on board watercraft	YES	●	6
Specific standard of lifejacket required	National standard		
Specific number of lifejackets required	YES	●	6

Watercraft often exempt from national maritime legislation: **None.**

CHILD SAFETY		
Fencing to exclude children from swimming pools	YES	8
Swimming lessons in school curricula	YES	5
Structured adult supervision of preschool children	YES	9
Prosecution of neglect against children	YES	8

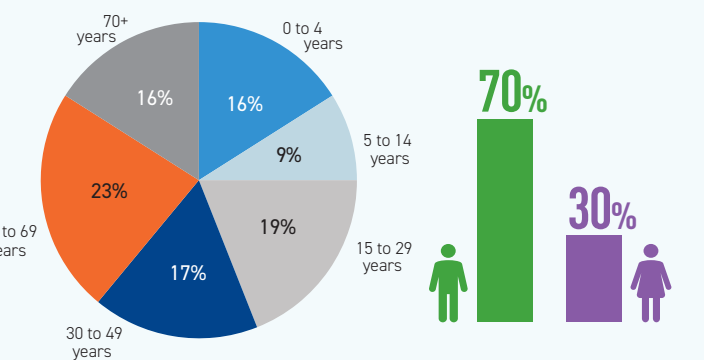
WATER SAFETY COMPETENCIES		
Required competencies for swimming instructors	YES	9
Required competencies for lifeguards	YES	9

DISASTER RISK REDUCTION		
Private communication channels broadcast disaster warnings	YES	9

DROWNING DATA		
One agency maintains all vital registry statistics	YES	9

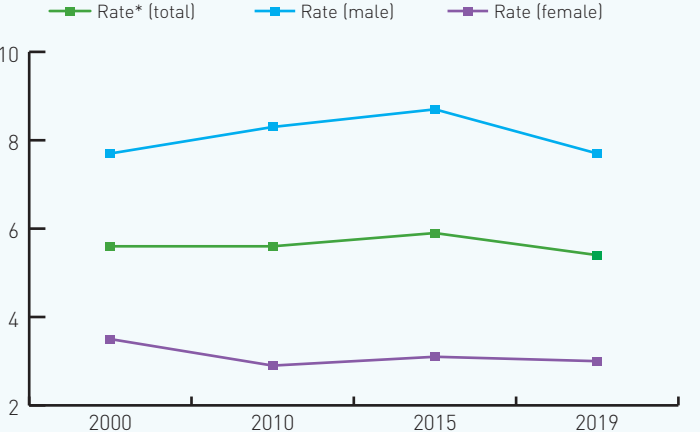
- No response or not applicable

SHARE OF DROWNING DEATHS BY AGE GROUP<sup>a</sup>



<sup>a</sup> Global Health Estimates (GHE) data, 2019  
<sup>b</sup> GHE data, 2000–2019

RATE OF DROWNING DEATHS<sup>b</sup>



\* rate = age-standardized death rate

## Annex 1. National Data Coordinators

Country/Area	Name	Organization
Australia	Stacey Pidgeon (Willcox)	Royal Life Saving Society – Australia
Cambodia	Ean Sokoeu	Ministry of Health
China	Deng Xiao	National Center for Chronic and Noncommunicable Disease
Cook Islands	Maina Tairi	Ministry of Health
Hong Kong SAR (China)	Paul Kwok-ming Poon	Department of Health
Japan	Horiuchi Hisayo	Ministry of Health, Labour and Welfare
Lao People's Democratic Republic	Bouathep Phoumindr	Ministry of Health
Macao SAR (China)	Lam Chong	Health Bureau
Malaysia	Komathi Pindaya	Ministry of Housing and Local Government
Marshall Islands	Rachel Bigler	Ministry of Health and Human Services
Mongolia	Amgalan Sanjaa Munkhbaatar Lkhaasuren	National Emergency Management Agency
New Zealand	Felicity Fozard	Water Safety New Zealand
Palau	Tmong Udui	Ministry of Health
Papua New Guinea	Peter Bell	National Maritime Safety Authority
Philippines	Agnes Segarra	Department of Health
Samoa	Rumanusina Maua	Ministry of Health
Solomon Islands	Geoff Kenilorea	Ministry of Health and Medical Services
Tonga	Eniselina Noema Walter Hurrell	Ministry of Health
Vanuatu	Roslyn Biagke	Ministry of Health
Viet Nam	Hoa Thi Kim Vu	Department of Children's Affairs of the Ministry of Labour, Invalids and Social Affairs



## Annex 2. Injury prevention focal persons at WHS

Country	Name
Cambodia	Nargiza Khodjaeva
China	Fang Dan
Cook Islands	Kolisi Viki
Lao People's Democratic Republic	Douangkeo Thochongliachi
Malaysia	Paul Soo
Marshall Islands	Eunyoung Ko
Mongolia	Bolormaa Sukhbaatar
Palau	Eunyoung Ko
Papua New Guinea	Jessica Yaipupu
Philippines	John Juliard Go
Samoa	Kolisi Viki
Solomon Islands	Kirsten Frandsen
Tonga	Yutaro Setoya
Vanuatu	Tsogzolmaa Bayandorj
Viet Nam	Phuong Nam Nguyen Lam Nguyen Tuan







