Analysis of Adult Swim Skills

February 2022



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OVERVIEW 61% female

38

9

Time in lessons

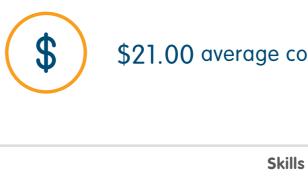


Average age

Average number of lessons attended

5 hours average lesson time

8%

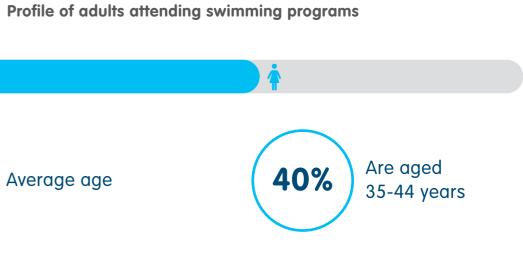


could swim 25m

of their lessons

or more by the end

14%



77% of adult swimming lessons were attending one 30-minute group lesson per week







Of adults stay in lessons for 12 months or more

\$21.00 average cost of an adult swimming lesson



BACKGROUND

CASE STUDY

The Australian Water Safety Strategy 2030 identifies swimming and water safety skills as a key factor for reducing drowning among all age groups. Royal Life Saving has conducted research on children's swimming and water safety skills for many years, however little is known about the level of skills among adults.

On average, 273 people drown every year in Australia, more than 80% are aged over 18 years.¹ Over the past decade, a significant decrease in drowning has been achieved among children 0 - 14 years however, the same change is not evident among adults.² In the 2021 National Drowning Report, adults aged 25 – 64 years recorded a 2% increase, and people aged 65 years recorded a 15% increase in fatal drowning on the 10year average.¹

Children are more likely to drown in swimming pools and the home environment, whereas adults commonly drown in natural water environments such as rivers, lakes, beaches and the ocean. This highlights the importance of learning and retaining swimming and survival skills that can be applied in a range of environments and activities.

Over the past ten years, Royal Life Saving has undertaken research to measure the swimming and water safety skills of Australian children attending school-based and commercial swimming lessons against the minimum competencies outlined in the National Swimming and Water Safety Framework.³⁻⁵ The 'Benchmark' identified for children to achieve before leaving primary school (around 11 – 12 years old) includes being able to swim 50 metres continuously and tread water for 2 minutes.

In 2020, The National Swimming and Water Safety Framework⁶ was revised to include a broader range of skills and milestones that cater to all ages and abilities, including adults.

The Framework now includes three benchmarks of which a few of the main skills are summarised below:

- Every Australian at the age of 6 years should be able to swim continuously for at least 5 metres, submerge and move through an obstacle, and identify people and actions to help in an aquatic emergency.
- Every Australian at the age of 12 years should be able to at least tread water for 2 minutes and swim continuously for 50 metres, rescue a person using a non-swimming rescue technique with non-rigid aids, and perform a survival sequence wearing clothing.
- > 50% of all Australians at the age of 17 years should be able to tread water for

5 minutes, swim continuously for 400 metres, rescue an unconscious person in deep water, and perform a survival sequence wearing heavy clothing.

For more information on the National Swimming and Water Safety Framework: <u>https://www.royallifesaving.</u> <u>com.au/educate-participate/swimming/national-</u> swimming-and-water-safety-framework

> The Y, NSW, Mt Annan "Never Too Late" campaign

The Y NSW ran a "Never Too Late" campaign for adults and teens at the Mt Annan Aquatic Centre. During summer 2021 (Term 1, January – April 2021), the aim was for adults and teens to feel welcomed and empowered to build confidence in the water. Staff identified that many parents or older siblings of current Learn to Swim students were unable to swim.

The "Never Too Late" campaign was marketed to the local community to make this the season to start their swimming journey. The campaign encouraged a reduction in stigma for teens and adults learning to swim – this targeted the diverse range of different nationalities and cultures within the Mt Annan locality, many of whom were not comfortable in an aquatic environment. Aquatic Centre staff were trained to ensure confidence in all areas as part of the campaign. The benefits of the "Never Too Late" campaign were promoted through media releases to boost outreach of the program.

The Y swim school at Mt Annan restructured their programs to meet the needs of their local community members. Adult lessons were offered on weekends or later times (6pm or later) to allow lessons to fit into schedules for those with full-time work or family commitments. Most of the teenage students were siblings of other students currently in swim programs at Mt Annan. These classes were allocated during our busy times, to allow families to match up their children's lessons. Primarily, the aim was to design and provide accessible swimming lessons for adults and teenagers. This was coupled with the need to create a safe space for vulnerable individuals to learn how to swim – without stigma. The creation of the new programs also provided an opportunity for professional development for staff, empowering and upskilling them to develop their teaching versatility and interpersonal skills with diverse members from the local community.

As a result of this campaign, enrolments of adult swimmers grew from 10 to 55 and the teens' enrolments from 36 to 66 in that same period. This increase in enrolments, , reflected the demand that was identified in our community, and developed greater engagement and participation in learn to programs among adults from the local Mt Annan community. While this was a one-off campaign in early 2021, it is hoped that the campaign can be repeated again in future.



STUDY RATIONALE

While these benchmarks are linked to age, it is unknown how many adults can achieve these minimum swimming and water safety competencies. Currently, there is limited information available on what adults are being taught and are learning in swimming programs, and what skillsets they are gaining.

Swimming and water safety research has primarily concentrated on children's swimming and water safety skills, and there is a gap in current research on the actual level of aquatic skills and abilities among adults. Several studies have explored the swimming and water safety skills of young adults at university, ⁷⁻⁹ however, most studies only focus on adults' self-rated ability and perception of skills opposed to actual skills.¹⁰⁻¹²

Recent Royal Life Saving research has surveyed adults on their swimming ability,¹³ with 35% of adults considered themselves to be a 'good or excellent' swimmer, and 25% considered themselves to be a 'weak or poor' swimmer. Interestingly, those aged 55 years and over were more likely than the general population to rate themselves as good or excellent swimmers, and adults from migrant backgrounds were more likely than the general population to rate themselves as weak or poor swimmers or could not swim at all. On average, most people thought they could swim 6 lengths of an Olympic swimming pool (50m), or approximately 300m. Most believed that could not swim the same distance in open water.¹³

The Australian Water Safety Strategy 2030 identifies swimming and water safety skill as a key factor for reducing drowning risk among all ages, including adults. Barriers for children accessing swimming and water safety education programs are well-known and include cost of lessons, residential location, socioeconomic status, and cultural background. Identified barriers for adults include a fear of water, language and other cultural factors, program availability, and childcare.¹⁴ Research has found that some adults did learn swimming and water safety skills in childhood, and they may be less likely to participate in the water as adults.

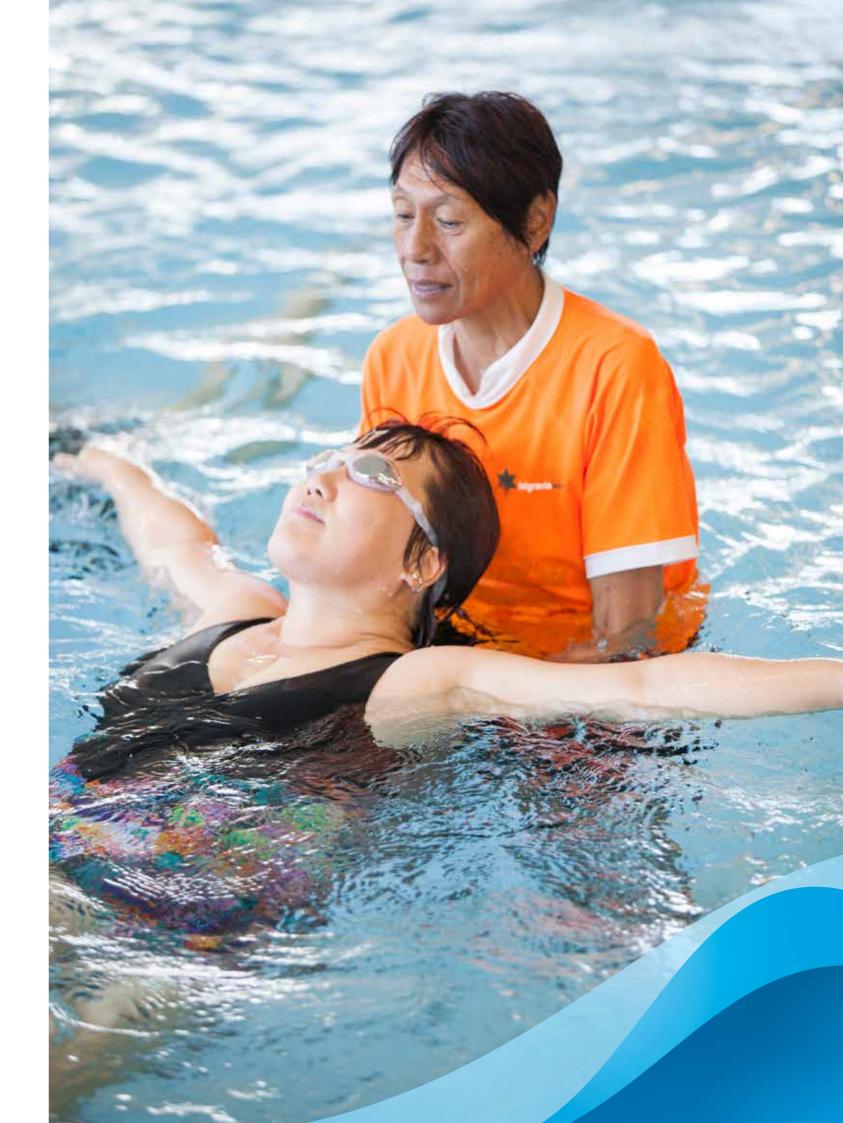
Increasingly funding is becoming available for swimming and water safety education programs aimed at adults, particularly those from 'high-risk' populations for drowning such as adults from multicultural communities.¹⁴ However, it is unknown how effective programs are in increasing skills among adults and the impact on drowning prevention. More research is needed to increase understanding of the acquisition of swimming and water safety skills during adulthood and the impact of learning skills, knowledge and behaviours on adults' safety in and around the water. Anecdotally, swim teachers have commented that teaching adults is very different from teaching children, with prior experience, attitudes, communication, and cultural issues factors influencing progress and skill retention at a greater level.

In order to inform future swimming and water safety education programs, it is important to understand who is attending, what their base skills are to start with, and skill progression of adults. For some who engage in swimming programs as adults, it is their first experience in the water, or even in a public swimming pool.

This study analysed the swimming skills of adults from both publicly accessible (e.g., public pools) and funded swimming programs across Australia, against the updated National Swimming and Water Safety Framework milestones outlined earlier.

Aims

- To understand who are attending adult swimming programs, how long they are in lessons and how much adults are spending on their own lessons.
- To explore the types of adult swimming and water safety programs currently being offered (i.e., content, lesson duration, number of lessons, funded and publicly accessible).
- To analyse skill progression of adults in swimming programs against the National Swimming and Water Safety Framework.



METHODS

This project used a retrospective cross-sectional study design using purposive sampling of swim schools who provide swimming and water safety programs to adults across Australia.

This study is not representative of all adults participating in programs nationwide; however, it will provide information on what adults in swimming lessons are learning and the competencies being achieved. This study replicated the same methods used by Royal Life Saving in previous research assessing the swimming and water safety skills of children in commercial (private) swimming and water safety programs.³⁻⁵

A purposive sampling approach was utilised to identify and recruit swim schools across Australia that offer adult swimming lessons (with a specific focus on swimming programs for adult migrants). In 2020 and 2021, the impact of Covid-19 resulted in widespread closures of aquatic facilities and swim schools, which impacted on data collection.

Variables analysed in this study were: gender, age, state, home postcode, swim school postcode, type of program, frequency of lessons, duration of lesson, cost per lesson, date started in swim level, name of swim level, date of last assessment, skill being assessed on, number of lessons. Cultural background, language spoken at home were provided by some programs, and were reported where known, however few providers capture this information. Information on medical conditions of adult swimmers was not available and it is unknown if this information is collected by providers.

Socio-economic status was reported on in this study, using the Socio-Economic Indexes for Areas (SEIFA), using the home postcode of the participants where provided. Socio-Economic Indexes for Areas (SEIFA) is an Australian Bureau of Statistics (ABS) product that ranks areas in Australia according to relative socio-economic advantage and disadvantage. The indexes are based on information from the five-yearly Census of Population and Housing. Areas ranked with a decile of 1 represent the lowest 10% ranking socio-economic areas in Australia. Areas ranked with a decile of 10 represent the highest 10% ranking socio-economic areas in Australia. The information requested from swim schools was their de-identifiable data of assessment records of adults who had participated in their swimming and water safety programs. This information is already collected by swim schools. In Australia, there is currently no one consistent method for collecting and reporting on swimming assessment data.

The data that was received was cleaned and coded in Microsoft Excel, and IBM SPSS Statistics V27 was used for data analysis. All Information was de-identified by the swim schools prior to sending to the researchers, ensuring that individuals and swim schools could not be identifiable. All data is aggregated for the results; reporting of the results will not identify individual swim schools.

Recruitment

Data for this research was obtained from a range of swim schools across Australia (local government, non-profit and commercial swim schools) and included funded, subsidised and private swimming and water safety programs for adults. The data collected in this study did include some single sex female-only and maleonly programs, however the majority of the data collected was from mixed gender swimming lessons. This study only included data from group swimming lessons, not private 1:1 lessons, although class sizes / ratios were not provided for this study.

An information sheet was developed and provided to each swim school approached to be part of the study. Letters of support from each swim school who agreed to be part of the study and provide their data were provided upon request.

Ethics approval was given from the James Cook University Human Ethics Research Committee (H7945).



> Blacktown Key Venues Swim Sense Adult learn to swim program summer 2020/21

Blacktown City Council offered free swimming and water safety to adults residing in the Blacktown City Council area. The aim of the Swim Sense program was increase awareness of safety around water, including the pool and beach, and developed skills to improve safety behaviours around water.

A total of 95 adults took part in the program over the 2020/21 summer over the five Blacktown City Council venues, 59% were female and 41% were male participants with an average age of 38 years.

Participants received four 30 minute sessions, covering water safety awareness education sessions, water familiarisation, and learn to swim lessons.

Blacktown City Council is committed to increasing water safety for all residents, with a particular focus on adults to ensure that they have the knowledge and skills to keep themselves and their families safer around water. This is one program within Blacktown City Council's Drowning Prevention Strategy.

Swim levels

Adult programs generally do not follow a comprehensive program level structure like those used for children's programs. Most used simple levels – beginner, intermediate and advanced as an indicator to measure swim skill development and progress. The criteria or skill set for each level was provided for all except two programs. Several programs in this sample used the Royal Life Saving Swim and Survive program.

The skills within levels varied between programs. For example, the skills included in 'beginner' levels ranged from being able to move through the water for 3 metres to swimming 25 metres. The skills in the 'intermediate' level ranged from swimming freestyle 15 to 50 metres, backstroke from 10 metres to 50 metres, survival strokes for 10 metres. The advanced skills ranged from swimming freestyle 50 metres to 100 metres, swimming backstroke 25 metres to 100 metres, treading water for 30 to 60 seconds.

To account for the range of skills and definitions of level across programs, the skills within each of the levels (where provided), was mapped against the development milestones in the Fundamental, Acquisition and Application stages of the National Swimming and Water Safety Framework. See Appendix 1 for how skills were mapped to the National Swimming and Water Safety Framework.

Similar to the children's benchmarking study, water safety and survival skills differed between programs and levels. Floating independently was featured in all beginner levels. In the intermediate levels, survival strokes were generally included in all levels. Treading water was included in all of the advanced levels. Very few other water safety skills, including rescue skills, were included throughout the levels.



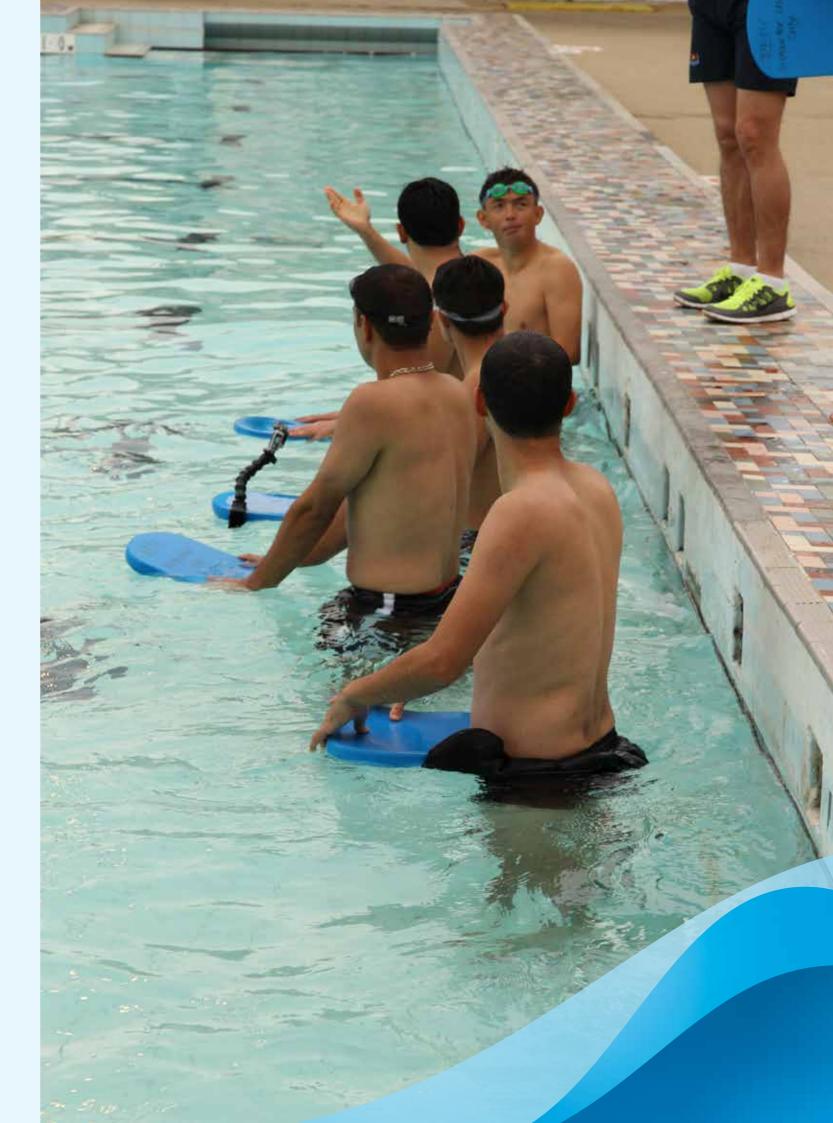
Progress in levels was calculated by comparing the assessment level at baseline to the final assessment (either at the end of the program, or last assessment on record).

- Same level = assessed at that level at first then working towards achieving outcomes of that level, same level at last assessment recorded to the baseline assessment. Note that some adults may have achieved some skills within that level, but did not achieve all the skills to progress to the next level.
- I or more levels = different level at last assessment recorded to the baseline assessment.

For example:

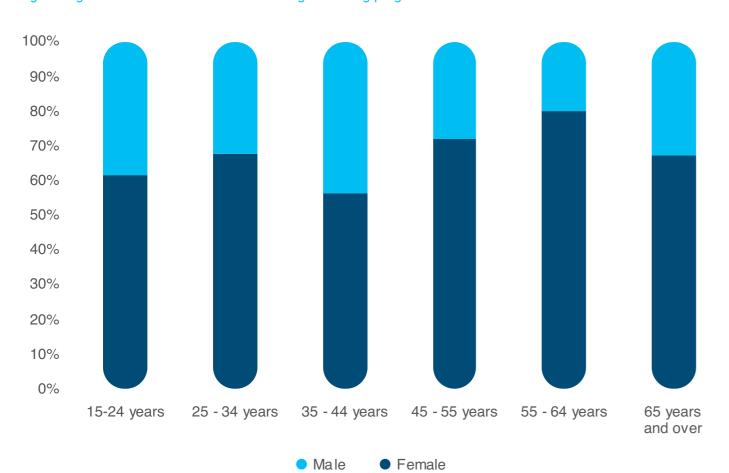
- Beginner to beginner level = same level (may have achieved some skills but not all skills to progress to intermediate level)
- Beginner to Intermediate = 1 level (achieved Beginner and working towards outcomes of Intermediate)
- Beginner to Advanced = 2 levels

 (achieved Beginner and Intermediate working towards outcomes of Advanced)
- Swim and Survive Program levels D1 to Active 1 = 1 level (achieved D1 and working towards outcomes of D2)
- Swim and Survive = D1 to Active 2 = 3 levels (achieved D1, Active 1 and D2 - working towards outcomes of Active 2)





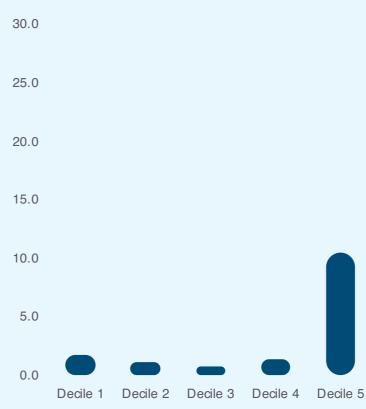
Age and gender breakdown of adults attending swimming programs



Postcode of participants was known in 53% of cases.

Of those, 84% of adults attending swimming programs were from areas high on the scale of social-advantage and disadvantage (SEIFA decile rank 6 – 10). There were no differences when analysed by sex, however when broken down by age groups, 30% of adults aged 65 years and over attending swimming lessons were from lower socio-economic areas (SEIFA decile rank 1 - 5).

SEIFA decile rank of residential postcode of adults attending swimming lessons



Decile 5 Decile 6 Decile 7 Decile 8 Decile 9 Decile 10

Cultural background and language spoken

Only 5% of swim programs recorded country of birth of adult swimmers. This was only recorded for fully funded programs. Those swim programs that did record this information were from New South Wales, Victoria, Queensland and Northern Territory.

Top five countries of birth:

- > 33% India
- > 11% China
- > 8% Vietnam
- > 4% Afghanistan
- > 4% Philippines

When asked about ethnicity (cultural background), over 30 different ethnic backgrounds were listed by swimming program participants.

The top five ethnicities participants identified as:

- > 37% Indian
- > 10% Chinese
- > 8% Hazara
- > 6% Karen
- > 5% Sri Lankan

When asked about language spoken at home, 37 languages were listed by participant.

The most common language spoken among participants being:

- > 19% Hindi
- > 16% English
- > 6% Karen
- > 5% Chinese (not specified)
- > % Mandarin

Table 2: Demographics of adults attending swimming programs

| Demographics variables | N | % |
|------------------------|------|------|
| Gender | | |
| F | 2170 | 44.2 |
| M | 1373 | 27.9 |
| Unknown | 1371 | 27.9 |
| Age groups | | |
| 15-24 years | 370 | 8.5 |
| 25 - 34 years | 1333 | 30.7 |
| 35 - 44 years | 1736 | 40.0 |
| 45 - 55 years | 548 | 12.6 |
| 55 - 64 years | 217 | 5.0 |
| 65 years and over | 139 | 3.2 |

ACT 1171 23.8 NSW 2926 59.5 NT 0.9 46 QLD 69 1.4 VIC 68 1.4 WA 634 12.9

Remoteness of residential postcode

| Metro | 3502 | 71.3 |
|--------------|------|------|
| Regional | 114 | 2.3 |
| Not recorded | 1298 | 26.4 |

Socio-economic status

| High (6-10) | 2195 | 84.4 |
|-------------|------|------|
| Low (1-5) | 406 | 15.6 |

Program Type

| Public adult lessons | 4062 | 82.7 |
|-------------------------------|------|------|
| Partially funded (subsidized) | 634 | 12.9 |
| Fully funded (no cost) | 218 | 4.4 |



> Royal Life Saving WA Multicultural programs

In Western Australia, swimming and water safety education programs for multicultural adults are available through a number of public and private pools, including separate women's and men's programs, in metropolitan and regional locations.

These programs are delivered by Royal Life Saving Western Australia in partnership with their Swim and Survive partners, many are local councils and independent swim schools. The programs are adapted to break down the barriers to participation and meet the needs of the communities they work with. Programs generally consist of eight 1-hour lessons and are subsidized for participants as the enrolment cost is guite often a barrier.

RLSSWA has conducted these programs since 2009, with over 1400 adults now participating each year, with 29% of adult swimmers repeat customers, enrolling in two or more programs.

- In October December 2021, 19 adults from multicultural backgrounds in the regional town of Port Hedland, Northern WA, had the opportunity to learn vital swimming and water safety skills via an 8-week Swim and Survive program in the lead up to summer.
- The RLSSWA Multicultural adults swimming lesson programs are supported by the RLSSWA Principal Community Partner BHP, Lotterywest and the Australian Govt Department of Health through Royal Life Saving Australia's Swim and Survive Fund.
- "The participants thoroughly enjoyed the journey, seeing their progress in skill an endurance through the weeks as well as developing friendships along the way. Every year the enrolment numbers increase, and it is great to see that the importance of learning to swim is a message that is well received."
- **Program Instructor Lauren Thompson**



General

- 83% of adults in this study were attending publicly accessible swimming lessons (e.g., public adult lessons at a local swimming pool)
- Public adult lessons ranged in duration from 30 minutes to 60 minutes, depending on the venue
- 13% were attending subsidised programs
- These programs consisted of 8 one-hour lessons over 8-weeks
- 4% were attending fully funded programs
- Lesson time ranged between 30 to 60 minutes in duration
- Funded programs ranged from 2 weeks of intensive lessons, up to 10 weeks or a term of lessons on a weekly basis

Duration of time adults spend in swimming lessons

Cost of lessons

- Lesson cost ranged from \$8.13 per lesson at a subsidised rate to \$21.00 for a public adult lesson
- The average cost of a single adult public swimming lesson was \$21.00
- Subsidised lessons in this study were charged at \$65.00 for 8 one-hour lessons over an 8-week period (\$8.13 per lesson)
- Note: this study only included group swimming lessons, not private 1:1 lessons, that are usually charged at a higher rate per hour than group adult swimming lessons.
- subsidised programs - 6% of adults enrolled in public programs

How long are adults

• 77% of adult swimming lessons

were attending one 30-minute

• Across all programs, most adults

up to 2 months or around 8-10

weeks (equivalent to a school

• On average, adults attended an

• This equates to an average of 5

• Total length of time enrolled in

lessons ranged from 1 week to 4

• Overall, only 6% of adults stayed

in lessons for more than 12

- 7% of adults enrolled in

were generally in lessons for

group lesson per week

average of 9 lessons

hours of lesson time

years or more

months

in lessons for?

term)

ANALYSIS BY TYPE OF PROGRAM

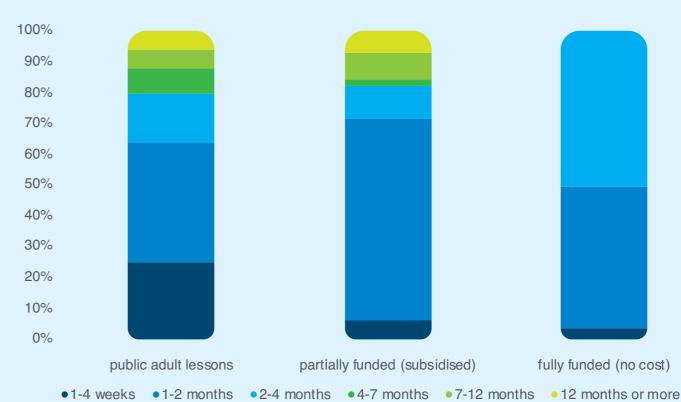
Public adult swimming lessons

- > Average time in lessons is 10 weeks = 10 lessons
- > This is based on one 30-minute lesson per week
- > Average hours in lessons = 5 hours
- > 39% were in lessons for between 1 – 2 months
- > 25% were in lessons for between 1 – 4 weeks
- > 21% continued lessons after 2 months

Subsidised programs

- > Average time in lessons is 8 weeks = 8 lessons
- > This is based on 1-hour lessons over an 8-week duration for subsidised programs
- > Average hours in lessons = 8 hours
- > 65% were in lessons for between 1 – 2 months
- > 11% were in lessons for between 2 – 4 months
- > 18% continued after the initial 8-week program

Time enrolled in lessons by program type



45% 40% 35% 30% 25% 20% 15% 10% 5% 0%

1-2 months 2-4 months 4-7 months 7-12 months 12-24 months 2 years or 1-4 weeks

(1-2 years)

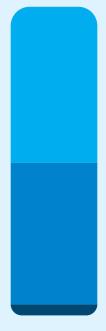
more

16

– 4 months or more

Fully funded programs

- > This is based on attending a single program of lessons ranging from a 2-week intensive program to 12 weeks (around 3 months)
- > Average number of lessons attended = 7 lessons
- > 51% were in lessons for between 2 – 4 months
- > 46% in lessons for between 1-2 months
- > Average hours in lessons – 4.5 hours



partially funded (subsidised)

fully funded (no cost)

LEVEL OF SKILLS

Information on assessment at the start of lessons was available for 75% of participants.

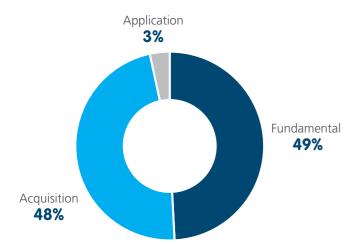
Because the skills within levels varied between programs, for example, the skills included in 'beginner' levels ranged from moving through the water for three metres to swimming 25 metres as discussed earlier, skills at the start and at the end of lessons were mapped to the National Swimming and Water Safety Framework stages and milestones within each stage. (Appendix 1)

At the start of lessons

- 49% were assessed as having skills equivalent to the Fundamental Stage
- 48% were assessed as having skills equivalent to the Acquisition Stage
- In total, 41% were assessed as having skills equivalent to Acquisition milestones H5-Q5 at the start of their lessons (Figure 1)

Note: 'Beginner' levels as used by programs were generally equivalent to Fundamental stage and 'Intermediate' levels were generally equivalent to Acquisition stage and have been mapped as such.

Adult swimming skill baseline level against the National Swimming and Water Safety Framework stages



Skills achieved at the end of lessons (final assessment)

- Final assessment was recorded for 86% of adult swimmers
- 94% of adults did not move up a level but may have achieved all the skills within the level they were first enrolled in by the end of their lessons
- 49% of adults were assessed as achieving skills equivalent to the Fundamental Stage at the completion of their programs
- 45% could swim at least 25 meters at the completion of their programs

Meeting the National Benchmarks

- 61% were meeting the National Benchmark set out to be achieved by 6 years of age
- 8% were meeting the National Benchmark set out to be achieved by 12 years of age, of swimming 50 metres or more at the completion of their lessons (Table 3)

Table 3: Final assessment levels mapped to the National Swimming and Water Safety Framework Swimming milestones

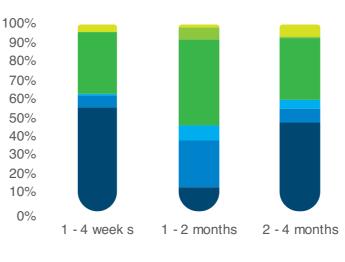
| Stage | % achieved | Swimming distance achieved |
|--------------------|---------------|--------------------------------------|
| Fundamental H1-L1 | 30.6% | Move in the water with assistance |
| Fundamental H3-Q3* | 18.4% | Move in the water 5 metres |
| Acquisition H4-Q4 | 5.7% | 15 metres |
| Acquisition H5-Q5 | 37.2% | 25 metres |
| Acquisition H6-Q6^ | 4.5% | 50 metres |
| Application - ALL | 3.4% | 100 metres or more |
| Total | 100.0% | |

*National benchmarks to be achieved by 6 years old ^National benchmarks to be achieved by 12 years old

Time spent in lessons against progress

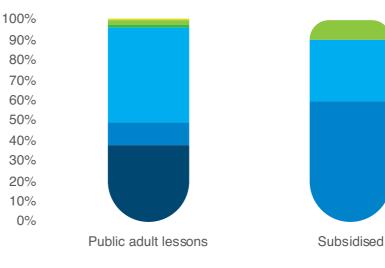
- The level of skills being achieved did not differ greatly when analysed by time in lessons
- Majority of swimmers are achieving skills at the Fundamental stage regardless of time in lessons
- 18% of swimmers who had been in lessons for 12 months or longer could achieve the benchmark level skills (Acquisition 6 or Application stage)
- However, overall, only 6% of adults stayed in lessons for more than 12 months

Time in lessons compared with level at final assessment





Achievement by program type



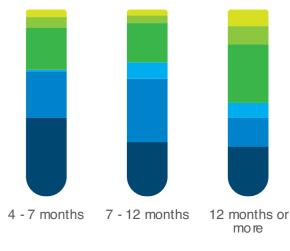


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Type of program and achievement of skills

- Across all program types, the majority of adults attending lessons are at the beginner or fundamental stage of acquiring skills
- Of all programs, subsidised programs recorded the highest proportion (10%) of adult swimmers achieving the benchmark skills (Acquisition H6-Q6 and higher)

*National benchmarks to be achieved by 6 years old ^National benchmarks to be achieved by 12 years old





more

Fully Funded

Acquisition H6-Q6[^]
 Application - ALL



DISCUSSION

This study explored who is attending lessons, the different types of swimming and water safety programs being offered to adults and analysed the skills that adult swimmers are learning and achieving during their time in these programs.

Who is attending and who is missing out?

This study highlighted that more women than men are attending swimming and water safety programs, despite adult males accounting for the biggest population for drowning.² Men continue to be overrepresented in drowning statistics and are thought to over-estimate their ability and skills around water. There are many reasons why adult men may not engage with swimming lessons or visit swimming pools, including being the main income earner in the family, cultural and religious barriers or being embarrassed about not being able to swim, or learning to swim as an adult and lessons not available at suitable times.

The average age of adult swimmers was 37 years of age, ranging from 17 to 84 years, indicating that adults of all ages, backgrounds and abilities are attending swimming lessons. Many providers did not record information such as cultural background, language or even gender. Of the programs that recorded cultural background of their adult swimmers, people from over 30 different ethnicities were identified, and 37 languages were recorded. Whilst this may be reflective of the communities programs were aimed at (or funded to work with), it does show that adults from a range of backgrounds and ages are interested in learning to swim and are attending swimming programs when they have the opportunity to do so. Swim program providers may find recording demographic information useful to better understand the needs of their adults swimmers and for tailoring of programs.

The majority of adults attending lessons were from higher socio-economic areas, indicating that adults from lower socio-economic areas and their families face barriers accessing swimming lessons, consistent with previous research. We know that there are still communities missing out entirely on a swimming and water safety education. Barriers to accessing swimming and water safety education programs are well-known for children including cost, transport, access to a suitable venue. Specific barriers for adults, especially for men, have not yet been explored in-depth and require further research. In this study, around 5% of data was from funded or subsidised programs. Funded or subsidised programs may be one way to increase participation in swimming programs for adults.

The majority of data in this study were from adult swimming programs in metro locations. Adult swim programs in regional areas were not well-represented in this study and more research is needed to address swimming and water safety program availability for adults in regional areas.

What types of swimming programs are available for adults?

This study identified that a variety of swimming programs are available around Australia for adults, including public swimming lessons, subsidised lessons, and fully funded programs.

This study found that on average, adults attend nine lessons. Most people were attending lessons on a weekly basis, with an average lesson time of 30 minutes, equating to around five hours total in the water. Most people were attending lessons on a weekly basis. The average cost of a public lesson was \$21.00, that equates to an average cost of \$189 for nine lessons. However, this cost may be an underestimate, as most swim program providers do require pre-payment for a full program or block of lessons, in which the total cost may be higher that what is reported in this study.

Subsidised programs generally ran for an eight-week block of 60-minute lessons on a weekly basis at a cost of \$65.00 total for 8 lessons. Fully funded programs ranged from 2-week intensive programs to programs ranging from 4 - 20 weeks of lessons and were between 30 to 60 minutes.

Unsurprisingly, adults were attending public lessons for a longer period of time that the subsidised or fully funded programs, likely due to the one-off nature of many funded programs that do not continue after a set number of lessons. Previous research has reported adults are willing to contribute to their lessons, however for some, the full price of \$21.00 per lesson was unattainable, especially if they were already paying for their children's lessons which they perceived as being more important.¹⁴ One evaluation study on swimming programs for migrant women found that some participants wanted to continue on after their initial funded program but were not provided with information on how to sign up or join public adult swimming classes at the pool.¹⁴

To encourage adults to continue lessons or other programs, it is important the right information is available to inform adults about swimming lessons or programs that are appropriate and relevant to them, swim schools and program providers may need to produce information in-language to better meet the needs of their communities.

Interestingly, when analysed by type of program and skills achieved, subsidised programs recorded the highest proportion (10%) of adults swimmers achieving skills at the 12-year-old benchmark level when compared with those in public and fully funded lessons.

What are adults learning in swimming and water safety programs?

This study revealed that the majority of adults enrolled in swimming lessons are only acquiring basic skills, equivalent to the Fundamental stage in the National Swimming and Water Safety Framework.

This study shows that many adults in lessons are learning very beginner level skills and may need to continue from their initial program in order to gain the required skills and knowledge towards achieving the National Benchmarks outlined for 6-year-old and 12-year-old children. Previous research has reported that some adults who attend swimming programs have never had formal lessons, have never been in the water or have a fear of water,^{14 15} which may explain the slower acquisition of skills among the swimmers in this study.

Previous research has found that the average time for children in commercial swimming lessons to achieve the 50-metre benchmark among children with no previous swimming experience was 16 lessons.⁴ When comparing to adults in this study, the average number of lessons adults were completing was nine lessons or five hours in the water. This study highlights there is an issue in the ability of swim school providers to retain adult swim lesson participants, possibly due to cost or lack of alternative pathways for continuing swimming lessons once a subsidised or fully funded program has ended.

Regardless of the type of program they were attending, and how long they had been attending lessons for, most adults were unable to swim more than 25 metres upon completion of their program. It is evident that 9 or 10 lessons (around 2 months or one school term) is not enough time to progress adults to achieving the 12-yearold benchmark skills of swimming 50 metres and floating or treating water for two minutes unassisted, especially for adults who have limited experience in water or have had to overcome a fear of water.

This analysis of adult swim skills showed that many adults are starting and finishing in the same swim program level. This may mean that whilst some adults may have achieved some skills within that level, and made some progress, they may not have achieved all the skills required to progress to the next level and may be leaving lessons before acquiring National Benchmarks for either 6-year-old or 12-year-old children. This may also be due to the fact that the level classifications for adults programs are very broad (Appendix 1) and the skills and swim distances are greater than what is often prescribed in children's programs. E.g., three metres in one level, then five metres in the next level, rather than five metres to 25 metres in adult levels. Adult program levels should be revised to better align to the National Framework while still being able to incorporate realistic and achievable goals.

Study Limitations

The de-identified data is a cross-sectional sample of adults attending selected swimming and water safety programs in selected states of a specific period of time (from 2015 – current) therefore may not be representative of all adults who have participated in swimming programs nationwide, or all programs that are available for adults.

De-identified data was obtained from selected swim schools and information is restricted to a number of variables collected by the swim school which may limit the ability to make further assumptions and comparisons against previous research that has been collected. Like children's enrolment data, demographic information such as cultural background, language, country of birth and medical conditions are not routinely collected by swim schools. As such any results pertaining to this information may not be representative to all adults in swimming programs.

In 2020 and 2021, the impact of Covid-19 resulted in widespread closures of aquatic facilities and swim schools, which impacted on data collection and the final sample analysed for this study. Regional areas were not well represented in this study, more research is required to explore opportunities for adult swimming and water safety programs in regional areas.



> Royal Life Saving NSW learn to swim programs for migrant adults

Royal Lifesaving NSW has been supporting learn to swim programs for adults from migrant backgrounds for many years, through a variety of different providers across NSW, predominately in Sydney.

Program evaluation has reported that swimming programs are highly valued by participants and greatly appreciated the opportunity to learn to swim without worrying about the cost, being in a supportive environment and the health benefits, such as increased physical and mental health outcomes.

The RLS NSW adult learnt to swim programs are supported by the NSW Government and Australian Govt Department of Health through Royal Life Saving Australia's Swim and Survive Fund.

"Because I've never swum in my life. I like water, but I have never tried to swim so when I asked if the program was going to happen I was very happy, this is my lifetime goal."

Female program participant

"Four sessions is not enough, longer time in the pool would be helpful."

Female program participant

Implications of this research

Most adults taking adult swim lessons are only acquiring basic skills in the water over a period of nine lessons. There is an opportunity to enhance existing programs or develop new adult programs that better meet the needs of adult swimmers to ensure that they gain an adequate level of both swimming skills and water safety knowledge to help keep themselves and their families safer around water.

We need to ensure that that by attending these swimming programs, adults are not in fact put at higher risk of drowning by introducing people to water, and only providing basic skills and confidence in a swimming pool environment without a pathway to continuing building on the foundation skills and knowledge. It is imperative that adult swimming programs incorporate both swimming, water safety and survival skills and knowledge; including what to do in an emergency.

Programs and related curriculum or lesson plans for adults should align to the National Swimming and Water Safety Framework to ensure that that adults learn the relevant skills and are prepared for realistic scenarios that they may find themselves in, in a range of aquatic environments. Water safety knowledge is an important aspect of learning water safety, swimming, and survival skills to ensure these scenarios can be prevented.

One of the key water safety messages for parents and grandparents is to supervise young children around water and be within arms' reach, in the water. It is imperative that adults understand what this means and are able to enjoy the water safely with their families and are taught to be able to respond in an emergency. Even though most adults in this study were only able to achieve basic skills in a swimming pool, it is realistic that some people will go swimming or recreating at other waterways such as beaches, rivers, and outdoor swimming pools with their family and friends. Research has reported that adults have increased their confidence in the water from participating in such programs, even if they haven't built up a high level of skills.¹⁴ This overestimation of skills is a known concern reinforced by this study.

The aim of any swimming, water safety or waterbased education should be to develop the skills and knowledge to keep themselves and their families safer around water. Partnerships and collaboration are required in order to develop effective programs that build the required swimming and water safety skills and knowledge needed to safely participate in aquatic activities. Comprehensive swimming and water safety programs tailored to adults should be delivered across a range of environments in partnership with swim schools and water safety partners such as Surf Life Saving, Maritime Safety agencies, and water sport clubs who want to ensure that all Australians can enjoy the water safely. This will enable people to enjoy a range of aquatic environments and locations safely.

Programs do exist that have been developed especially for adults, such as the Royal Life Saving Grey Medallion and the Surf Life Saving Silver Salties programs, however these initiatives are primarily aimed at older adults aged 55 years and older who 'can swim' but may need a refresh of their skills and fitness, including CPR and first aid.

There is a current gap in programs and funding opportunities designed to transition adults (of all ages) from a pool facility to an open water environment in a safe and controlled setting. Ocean pools may be one option to experience salt water, currents and movements in a more controlled setting, before moving to a fully open water environment. While the overall focus of learning swimming and water safety skills is to prevent drowning, swimming offers multiple benefits for adults, especially as people age. Research by Royal Life Saving reports that people gain \$26.00 of health benefits from visiting their local pool¹⁶; and swimming programs provide multiple health and wellbeing benefits such as increased fitness, feeling more relaxed, less muscle soreness and pain, better sleep and making new friends.¹⁴ To encourage adults to continue swimming, future programs could be more health promotion focused, promoting the health and well-being benefits of swimming and aquatic activity such as aqua fitness. Additionally, promoting other fitness opportunities that swimming can lead to, such as triathlons, ocean swimming or aqua fitness may be a motivation for some adults to continue lessons.

While few may be interested, pathways to swim teacher and lifeguard should be offered to adults who are interested in pursuing a career or employment in the aquatics industry. Life Saving Victoria's Multicultural programs provide a pathway for young adults from learning to swim and water safety education through to training support programs to become pool lifeguards, swim teachers and volunteer surf life savers.



This study highlights the need to provide opportunities or pathways for adults to continue building their skills, knowledge and confidence that can help in the transition from a pool environment to natural water where adults may go with their family and peers. Aquatic education programs that focus on common activities adults are likely to participate in their family and friends, such as boating, fishing, snorkelling, diving, surfing, should be considered and made widely available.



PRACTICE

- Develop specific programs for adults that go beyond 10 lessons, in order to help build skills and knowledge aligned to the National Benchmarks.
- Deliver adult programs / lessons outside of work hours and on the weekend wherever possible and provide options for childcare to support greater enrolment of adult swimmers.
- Partner with community agencies to better understand the needs of males wanting to improve their swimming and water safety skills.
- Develop a pathway program for adult swimmers that follows on from the initial program to build on skills and knowledge to meet the National Benchmarks and into other water-based activities.
- Promote and produce information about adult swimming programs in-language to better meet the needs of local communities.
- Develop and deliver programs designed to transition adults (of all ages) from a pool facility to and open water environment in a safe and controlled setting.
- Develop broad aquatic education programs and partner with other water safety organisations to develop and deliver programs that focus on common activities adults are likely to participate in, such as boating, fishing, snorkelling, diving, surfing, should be considered and made widely available.



POLICY

- Develop a national curriculum specific to adults that is aligned to the National Swimming and Water Safety Framework and includes CPR and first aid skills and knowledge.
- Provide the same opportunites to accessing swimming and water safety programs for adults as for children by building into exisiting mechanisms where possible such as through education, settlement support, community programs and english language classes.
- Provide opportunities for subsidised programs across Australia where adult swimmers from a range of backgrounds can access lessons and continue to attend for a longer duration.
- Develop adult swimming and water safety programs with a broader focus on health promotion, physical health and overall wellness.
- Develop a national database with minimum information program providers should be collecting to better undertand who is attending programs, how long and level of skills being achieved for both children and adults and improve consistency in national data.



RESEARCH

- Conduct research into adult swimming and water safety programs in regional areas to better understand access and availability and the gaps in adult program delivery.
- Conduct qualitative research to better understand the barriers preventing adults from attending and/or continuing in swimming lessons.
- Develop a process evaluation framework that can be utilised by swim schools / teachers to collect information that will inform and improve future development and delivery of future programs (children and adults).
- Develop a national database to record consistent information on swimming and water safety programs for all ages that is easy for swim schools and teachers to use.
- Collect demographic information such as cultural background, language and prior experience in the water to better understand the needs of adults swimmers to enable tailoring of programs where possible.

CONCLUSION

The Australian Water Safety Strategy 2030 recognises a lack of swimming and water safety skills as one contributing factor to drowning. There is a need to ensure that people of all ages, backgrounds and abilities can access high quality swimming and water safety education programs. This study adds to the research gap around the skills and water competencies of adults.

While further research is needed, this study has broadly identified what adults are learning and achieving in swimming programs across Australia, and highlighted gaps where data collection can be improved. This research can inform the development of future programs to best meet the needs of adult swimmers, to reduce drowning among adults and support their safe enjoyment of Australia's diverse waterways. Mapping levels and skills to the National Swimming and Water Safety Framework (NSWSF) milestones: Examples of levels and skills included in adult programs in this study.

| Level | Skills | Aligned to key milestone in NSWSF | | | |
|----------|--|--------------------------------------|----------------|--|--------------------------------|
| Beginner | Push & Glide – 6m | Fundamental S3 | Adult Beginner | Dangers: Identify Dangers around aquatic environment and around the homes | Fundamental H2 |
| | Push, glide, kick – 8m Paddling and kicking OR basic freestyle (no breathing) 10m | Fundamental S3 Fundamental S3 | | Safe entry: Ways of safely entering the water - Slide in entry and exit | Acquisition E4 |
| | Roll and float independently | Fundamental F3 | | Float: Floating on the water surface on (front, back and recover). Float with buoyant for 30 sec and kick for safety | Fundamental F2-F3 |
| | Back kicking with arms by side – 8m | Fundamental S3 | | Tread water: using floatation device e.g. Pool noodle, Lifejacket | Fundamental F3 - Acquisition F |
| Beginner | Breath Control & Submersion: for 10 secs | Fundamental U1 | | Swim: 5m using basic freestyle | Fundamental S3 |
| | Front Float: independent with recovery for 10 secs | Fundamental F3 | | Gliding: on the front, back and kick and recover | Fundamental S2-S3 |
| | Front Push & Glide: no kick for minimum 5m | Fundamental S3 | | Submersion: Submerge in the water to recover an object | Fundamental U2-U3 |
| | Front Push, Glide & Kick: with strong/long kick for minimum 6m | Fundamental S3 | | from the chest deep water | |
| | Long Arm Paddles: with long/strong kick for minimum 12m | Fundamental S3 | | Call for help: Identifying ways to call for help | Acquisition L4 |
| | Back Float: independent with recovery for 10 secs | Fundamental F3 | | Rescue water safety: how to rescue someone and be pulled to safety | Acquisition R4 |
| | Back Push & Glide: no kick for minimum 5m | Fundamental S3 | Beginner | Ears in the water, Starfish body position, Comfortable recovery to a safe standing position | Fundamental F3 |
| | Back Push, Glide & Kick: with long/strong kick for minimum 6m | Fundamental S3 | | Face in the water, Eyes looking down, Starfish body position, blowing bubbles, Recovery to a safe standing position | Fundamental F3 |
| | Treading water for 15 secs | Fundamental F2- F3/Q3 | | Using front and back float skills, Rotate from one float | Fundamental F3 |
| | Sculling for 10m | Fundamental S3 | | position to another, Recover to a standing position Blowing bubbles, Completely submerse body, Recover to a | Fundamental U1 |
| Beginner | Water familiarisation/confidence | Not specific | | standing position | |
| | Buoyancy | Not specific | | Unaided with minimal assistance, Into deep water out of their depth | |
| | Breath control | Not specific | | Face in the water blowing bubbles, Arms extended, Continual, flutter kick, Confident and comfortable distance | Fundamental S3 |
| | Kicking and overarm action/recovery | Not specific | | of 5 metres | |
| Beginner | Slide in entry | Acquisition L4 | | Ears in the water, Tummy up, Continual, flutter kick, Good body position, Confident and comfortable distance of 5 | Fundamental S2 |
| | 10 metres streamlined push and glide | | | metres with an aid, Confident and comfortable distance of 3 metres with arms by side | |
| | Up to 25 metres freestyle | Acquisition L5 | | Horizontal body position, Basic flutter kick, Arms performing | Fundamental S2 |
| | Up to 25 metres backstroke | Acquisition L5 | | an underwater digging action, Comfortable and confident distance of 3 metres | |
| | Back float unassisted | Fundamental F3 | | Streamlined body position, Flutter kick, Hands together, face | Fundamental S2 |
| | 10 second back float unassisted | Fundamental F3 | | down blowing bubbles, Confident and comfortable distance of 3 metres | |
| | Float and kick on back | Fundamental F3 | | Dry land or in water walking, Basic freestyle arm action, "Dig and Over" | Fundamental S2 |
| | Push off wall to bottom of pool, swim 3 metres along bottom and resurface | Fundamental U3 | | Dry land or in water walking, Basic backstroke arm action, Focus on little finger entering the water first | Fundamental S2 |
| | Tread water for 30 seconds | Fundamental F3-Q3 | Adult Basic | Aim to learn water familiarisation/confidence, buoyancy, breath control, kicking and overarm action/recovery | Fundamental E3-L3 |
| | 10 metre back scull | Fundamental S3 | | breath control, kicking and overann action/recovery | |

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Royal Life Saving is focused on reducing drowning and promoting healthy, active and skilled communities through innovative, reliable, evidence-based advocacy; strong and effective partnerships; quality programs, products and services; underpinned by a cohesive and sustainable national organisation.

Royal Life Saving is a public benevolent institution (PBI) dedicated to reducing drowning and turning everyday people into everyday community lifesavers. We achieve this through: advocacy, education, training, health promotion, aquatic risk management, community development, research, sport, leadership and participation and international networks.

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