

## RESEARCH & POLICY SUMMARY:

### BENCHMARKING AUSTRALIAN CHILDREN'S SWIMMING AND WATER SAFETY SKILLS: SWIM SCHOOL DATA

CHILDREN AGED 5 – 15 YEARS



**ROYAL LIFE SAVING**  
AUSTRALIA



## EQUAL NUMBER OF MALES AND FEMALES ATTEND PRIVATE SWIMMING LESSONS

### TOP 3 AGE GROUPS

18% 6 YEARS

17% 5 YEARS

17% 7 YEARS

### SKILLS BEING TAUGHT

87% FREESTYLE

84% BACKSTROKE

53% TREADING/  
SCULLING WATER

46% SURVIVAL  
BACKSTROKE

9% RESCUE  
TECHNIQUES

### WHERE

94% MAJOR CITIES

57% HIGH  
SOCIO-ECONOMIC  
AREAS (7-10)

### WHAT



LESSON COST RANGED FROM \$15.00 TO \$21.83, AVERAGE COST WAS \$15.50 PER LESSON



AVERAGE AGE TO ACHIEVE 50M FREESTYLE IS AT 9.2 YEARS AND 25M SURVIVAL BACKSTROKE IS AT 10 YEARS

## Background

This report provides a situational analysis of the swimming and water safety skills of Australian children attending private swim schools. The level of children's swimming and water safety ability has been the subject of much research and debate from within the wider swimming and water safety industry and at a political level. As a result, Royal Life Saving Society – Australia (RLSSA) has conducted a series of research projects investigating Australian children's swimming and water safety ability, including the social context, the economic implications and overall health and wellbeing benefits. The Australian Water Safety Strategy 2016-2020<sup>1</sup> prioritises reducing drowning deaths in children aged 0 – 14 (Goal 1), particularly focusing on advocacy for compulsory aquatic education for children 5 – 14 years and developing a mechanism for regularly measuring children's swimming skills.

The National Swimming and Water Safety Framework<sup>2</sup>, endorsed by the Australian Water Safety Council is the guiding strategy by which to measure children's swimming and water safety skills, aligned to school years 1 - 7. The Year 4 standard skills have been determined as the minimum competencies a child should be able to adequately perform prior to leaving primary school (around 11 or 12 years of age), hereafter referred to as the 'Benchmark'.

This research on what children are learning and achieving in private swimming lessons fills a gap in the existing knowledge of children attending government, school, and vacation swimming programs and their level of achievement<sup>3-5</sup>.

### Participation in swimming and water safety programs and achievement of the benchmark

It is estimated that private swim schools are teaching between 17-24% of Australian children aged 0 – 14 years annually<sup>3,6</sup>. Previous research of Australian school and vacation based swimming and water safety programs indicate that the Year 4 Benchmark can be achieved prior to leaving primary school; however it is not currently being achieved by 100% of children for a variety of reasons.

Common barriers cited by schools include program cost, crowded curriculum, transport costs, and risk management procedures<sup>3-5,7</sup>. Specific issues include a lack of qualified aquatics teachers, particularly in regional areas<sup>4,5</sup> and cultural barriers have emerged as an issue in metro areas<sup>5</sup>. Further research is required to fully understand why children are not attending lessons, and if they are, why they are not achieving the minimum competencies.

### Water safety skills and knowledge

Previous research has consistently reported a lack of water safety knowledge and awareness among primary school children, including resuscitation knowledge<sup>4,5,8-10</sup>. Research suggests that up to 82% of swim schools may not be including essential water safety and survival skills<sup>4,6,10</sup>. Previously, children's water safety knowledge has been assessed against the National Water Safety Quiz, an online quiz that assesses children's water safety knowledge; approximately 4,200 children mostly aged between 10-12 years nationwide participated<sup>9</sup>. Results showed that the water safety knowledge of aquatic environments were generally well understood, however there was a lack of knowledge regarding resuscitation, and personal awareness and swimming. Overall, children's knowledge increased as they aged and females scored better than males in every section<sup>9</sup>.

Water safety knowledge is included in all levels of the National Swimming and Water Safety framework as 'Answer questions about dangers in the aquatic environment'<sup>2</sup>. Whilst many children in the dataset were achieving this outcome, information on how or what children were actually learning was unknown. As a result, water safety knowledge was not included in this analysis.

Little is known about the swimming and water safety skills of older children, teenagers and youth; resources have largely been targeted towards primary and preschool children and less attention given to secondary school aged children and young adults. As the drowning rate increases post-school age, and changes from the domestic environment to natural waterways, further research is required to understand the contributing factors for drowning among this population.

## Aims

- To examine the achievement of swimming and survival skills among Australian children attending private swimming lessons
- To provide a situational analysis or 'snapshot' of what children are currently learning in private swim lessons, when they are learning key skills and how this compares to the Year 4 standard 'Benchmark' skills
- To identify and provide a better understanding of achievement levels in relation to demographic factors and participation on a national level
- To estimate how much time and financial investment is required to achieve the 'Benchmark'

## Methods

Data was obtained from a national database of private swim schools, consisting of student records from July 2014 to December 2016. All information provided was anonymous, therefore individuals and swim schools were unable to be identified. Data was cleaned in Microsoft Excel and data was analysed using SPSS. Data for this research does not represent the entirety of children participating in private swimming and water safety lessons nationwide. For the purpose of this study, swimming and water safety skills of children aged 5 – 12 years (N = 43,201) and teenagers aged 13 – 15 years (N = 2860) have been measured against the National Swimming and Water Safety Framework Year 4 standard competencies – the national 'Benchmark'.

## Results

### Snapshot of children attending private swimming lessons

A total of 46,061 children aged between 5 – 15 years were included in this study.

- 50.8% were males
- 51.5% were aged between 5 – 7 years
- 2.1% were aged 13 – 15 years
- 94.3% swim schools were in major cities
- 57.0% of children were living in higher socio-economic areas (ranked deciles 7 – 10)
- 10.7% in lower socio-economic areas (decile 1-3).
- Lesson cost range from \$15.00 to \$21.83, most parents are paying \$15.50 per lesson (68.7%)

### Skills children are learning

The most widely taught skills within this sample of swim schools are:

- 87.4% freestyle and 83.5% backstroke
- 52.7% treading/sculling water
- 52.1% breaststroke
- 45.6% survival backstroke
- 14.2% butterfly
- 9.2% rescue skills (Figure 1)

Of the 136 swim school levels recorded, one fifth (21.3%) did not contain any water safety or survival skills as per the Framework.

### Achieving the Year 4 Standard Benchmark skills

The average age children are achieving the benchmark is at:

- 50m freestyle is at 9.2 years (Figure 2)
- 50m backstroke at 9.6 years
- 25m survival backstroke is at 10.0 years (Figure 3)
- 25m breaststroke at 10.4 years

Results of 12 year old children:

- 60.2% could swim 50m freestyle and backstroke
- 76.7% could swim 25m survival backstroke
- 67.7% could swim 25m breaststroke
- 32.3% could tread/scull water for two minutes
- 29.1% could perform a rescue over 5m

For those aged 13 – 15 years:

- 65.9% could swim at least 50m freestyle
- 64.0% could swim at least 50m backstroke
- 73.9% could swim at least 25m survival backstroke
- 95.0% could swim at least 25m breaststroke
- 49.1% could tread water or scull for at least 2 minutes
- 35.2% could perform a rescue over 5m

### Number of lessons required to achieve 50m freestyle

For children who have undertaken some level of swimming lessons prior to reaching the 50m freestyle swimming level, it takes an average of 12 lessons to achieve 50m freestyle.

For children without any previous swimming experience, it takes an average of 16 lessons to achieve 50m freestyle. Using \$15.50 as the average cost per lesson, the average cost to achieve 50m is \$186.00 and \$248.00 respectively. On average, primary school aged children achieving 50m freestyle have attended 30 private swimming lessons over a time period between 12-15 months (not necessarily consecutively). Children aged 13 – 15 years attended an average of 31 lessons over a time period of approximately 7 months, and were generally were only in lessons for 1 swim school level (overall, not just those achieving 50m freestyle).

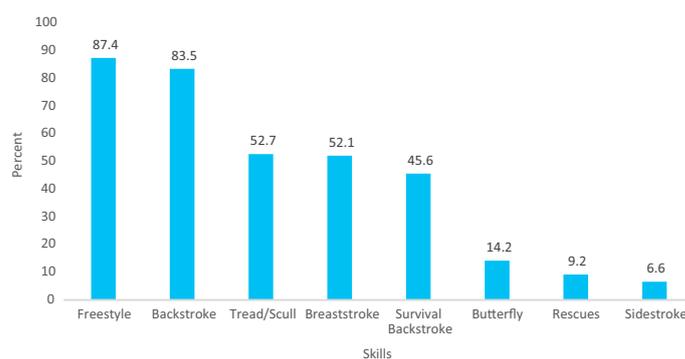


Figure 1: Skills children are being taught in private swim schools

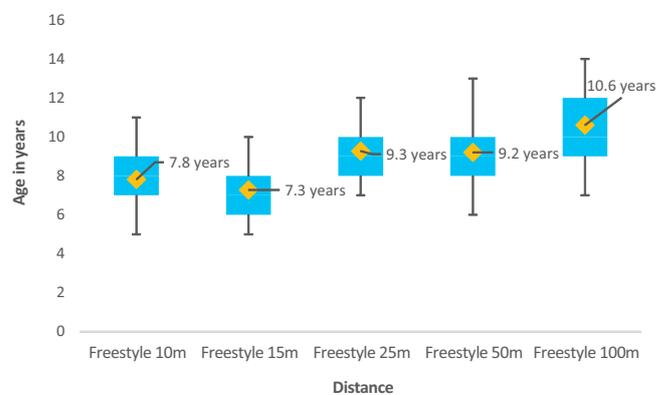


Figure 2: Average age achieving key freestyle milestones

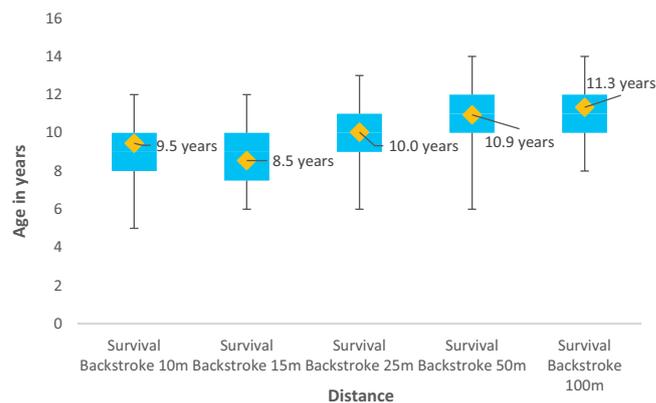


Figure 3: Average age achieving key survival backstroke milestones

## Key Insights

- 52% of children in this study are aged between 5 – 7 years old, suggesting that children may be starting and exiting swimming lessons at a younger age
- Children from high socio-economic areas are more likely to be attending swimming lessons and from an earlier age than children from low socio-economic areas
- Average age to achieve 50m freestyle and backstroke is at 9.2 years and 25m breaststroke and survival backstroke at 10 years
- 40% of teenagers were not achieving the the National Benchmark
- 80% could achieve 50m freestyle within 30 lessons regardless of experience
- Children are not being taught water safety skills to the same level as the traditional strokes of freestyle, backstroke and breaststroke

## Implications

- If children are exiting lessons prior to achieving key swimming and water safety skills, a second round of swimming and water safety lessons in upper primary school may be required to renew and develop sufficient survival and rescue skills before they participate in risk taking behavior and wider range of aquatic activities and environment with and without supervision.
- If children are not being taught vital water safety and survival skills, they may not develop and gain the minimum competencies required to keep themselves safe in and around aquatic environments.

## Next steps

- Continued advocacy to remove barriers and ensure access to quality swimming and water safety education by all Australian children
- Utilise this data to advocate for renewed investment in swimming and water safety education for school aged children by State/ Territory and Federal Government programs
- Finalise the review of the National Swimming and Water Safety Framework, ensuring a stronger emphasis on essential water safety skills
- Undertake an in-depth analysis of pre-school children under 5 years attending private swimming lessons
- Strength the development of children's participation in rescue and resuscitation skills

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