



Investigation into ways to prevent or reduce
deaths of children by drowning

Ombudsman Western Australia
Serving Parliament – Serving Western Australians

Major Investigations and Reports

Title	Date
<u>Investigation into ways to prevent or reduce deaths of children by drowning</u>	November 2017
<u>A report on giving effect to the recommendations arising from the Investigation into issues associated with violence restraining orders and their relationship with family and domestic violence fatalities</u>	November 2016
<u>Investigation into issues associated with violence restraining orders and their relationship with family and domestic violence fatalities</u>	November 2015
<u>Investigation into ways that State Government departments and authorities can prevent or reduce suicide by young people</u>	April 2014
<u>Investigation into ways that State Government departments can prevent or reduce sleep-related infants deaths</u>	November 2012
<u>Planning for children in care: An Ombudsman's own motion investigation into the administration of the care planning provisions of the Children and Community Services Act 2004</u>	November 2011
<u>The Management of Personal Information - good practice and opportunities for improvement</u>	March 2011
<u>2009-10 Survey of Complaint Handling Practices in the Western Australian State and Local Government Sectors</u>	June 2010

The office of the Ombudsman acknowledges Aboriginal and Torres Strait Islander people of Australia as the traditional custodians of Australia. We recognise and respect the exceptionally long history and ongoing cultural connection Aboriginal and Torres Strait Islander people have to Australia, recognise the strength, resilience and capacity of Aboriginal and Torres Strait Islander people and pay respect to Elders past, present and future.

Table of Recommendations

Recommendation 1

The Department of Mines, Industry Regulation and Safety continues to develop and implement strategies for educating parents and caregivers regarding the importance of maintaining active supervision of children who are placed in bath seats and of avoiding altogether the use of floor seats in the bath or shower.

Recommendation 2

The Department of Mines, Industry Regulation and Safety continues to monitor data specifically regarding fatal and non-fatal drowning incidents that occur in the bath and, if warranted, pursue the development of further regulation applicable to the products associated with these incidents.

Recommendation 3

Taking into account the findings of the Investigation, and the findings and recommendations of the Coroner regarding private swimming pools at rental properties, the Department of Mines, Industry Regulation and Safety develops and implements further strategies designed to ensure that real estate agents, including property managers, and private landlords, respond appropriately to information regarding swimming pool barriers that do not comply with the *Building Act 2011* and the *Building Regulations 2012*.

Recommendation 4

The Department of Mines, Industry Regulation and Safety considers the introduction of requirements for property managers and private landlords to provide, in the most cost-effective way and resulting in the least regulatory burden, a copy of the most recent inspection form confirming that the swimming pool barrier was found to be compliant, to the potential tenant at the time of entering into a lease agreement.

Recommendation 5

The Building Commissioner reviews the operation of section 33 of the *Building Act 2011* in order to determine the level of compliance of permit holders (including owners, registered and unregistered builders and swimming pool barrier installers) with requirements to submit notices of completion for private swimming pools and their barriers in accordance with section 33.

Recommendation 6

In undertaking the review of the operation of section 33 of the *Building Act 2011*, the Building Commissioner works cooperatively and collaboratively with local governments to increase compliance by permit holders (including owners, registered and unregistered builders and swimming pool barrier installers) with section 33 of the *Building Act 2011* through a series of the most complementary strategies utilising the expertise and experience of the Building Commissioner and ensuring that such strategies are the most cost-effective and result in the least regulatory burden. At a minimum, consideration should be given to:

- (i) the provision (by either local governments, the Building Commissioner or both) of advice, information, education and training for permit holders regarding the requirements and importance of section 33 of the *Building Act 2011*;
- (ii) the Building Commissioner undertaking risk-based compliance audits of the work and conduct of registered builders of swimming pools;
- (iii) measures which specifically target increased compliance by builders and installers of swimming pool barriers who are not registered builders; and
- (iv) where appropriate in all of the circumstances, use of sanctions by local governments, as provided for by the *Building Act 2011*.

Recommendation 7

The Building Commissioner monitors local governments' compliance with regulation 53(1) of the *Building Regulations 2012*, including by requiring that local governments report on compliance with regulation 53(1) each year, and that the Building Commission reports this information to Parliament in its annual report.

Recommendation 8

The Building Commissioner provides guidance to local governments regarding the manner and form in which the information relating to swimming pools and their barriers should be kept including the key elements of any associated record management system, bearing in mind the need to avoid any inappropriate regulatory burden particularly for small local governments and local governments with few recorded swimming pools in their districts.

Recommendation 9

Taking into account the findings of the Investigation, the Building Commissioner, subject to consultation, and in development with local governments and industry stakeholders, reviews the concessions for pre-November 2001 swimming pools provided for in regulation 52 of the *Building Regulations 2012*, with a view to considering whether an amendment to the *Building Regulations 2012* ought to be made to remove these concessions. If regulatory changes are made, any such regulatory change should consider an appropriate extended phase-in period to take into account regulatory (sovereign) risk and costs imposed upon existing property owners.

Recommendation 10

The Building Commissioner clarifies with local governments the charges that local governments are able to impose for inspections of swimming pool barriers, including whether these charges may be imposed only in the year of an inspection, or each year.

Recommendation 11

The Building Commissioner consults with local governments regarding the adequacy of charges to meet the cost of swimming pool barrier inspections, including:

- (i) establishing the actual cost of the efficient delivery of swimming pool barrier inspection practices;
- (ii) if appropriate, seeking an amendment to the *Building Regulations 2012* so that the allowed charge reflects this efficient cost; and
- (iii) informing local governments of the efficient cost so that such cost is transparent and borne by the users of the system (that is, ratepayers who have a swimming pool and not cross-subsidised by non-swimming pool owners).

Recommendation 12

The Building Commissioner, in consultation with local governments and other stakeholders, considers whether it would be appropriate to co-ordinate the development and provision of a training program (including curriculum, scheduling arrangements, modes of delivery and assessment methods) specifically for inspectors of swimming pool barriers. In doing so, the Building Commissioner can take into account matters relevant to the expertise and experience of the Building Commissioner, but should at a minimum consider:

- (i) the cost of the program including developing and delivering the program at least cost to taxpayers. For example, the Building Commission could consider funding such training from the Department of Mines, Industry Regulation and Safety's internal training fund. Such funding would not require new funding and potentially represents a cost-beneficial way of contributing to enhanced inspection standards and enhanced protection for Western Australian children and ultimately the reduction of risk of child death by drowning;
- (ii) any unintended consequences of establishing the training program, including if establishing the program could act to restrict the supply of inspectors and thus exacerbate the difficulties in recruiting inspectors; and
- (iii) if the training program can and should be linked to the national training system.

Recommendation 13

The Building Commissioner, in consultation with local governments and other stakeholders, considers improvements to training in compliance promotion and conflict resolution. This could be included as part of the training program developed specifically for inspectors of swimming pool barriers, discussed at Recommendation 12.

Recommendation 14

The Building Commissioner, in consultation with local governments and other stakeholders, considers the development and provision of a systematic program of cost-effective continuous professional development for inspectors of swimming pool barriers to support inspectors to remain up-to-date with changes in the legislation, regulations and standards.

Recommendation 15

The Building Commissioner considers the promotion of a quality assurance process (for which there is currently a good practice example) for swimming pool barrier inspections to local governments. This quality assurance process could include reviewing a sample of inspections undertaken by each inspector at appropriate intervals throughout the inspection program, with additional information on this process included in the *Inspector Guidelines*.

Recommendation 16

The Building Commissioner works with local governments and other stakeholders to develop a template swimming pool barrier inspection checklist template, which incorporates all of the required elements to meet the applicable standards, and is as efficient to complete as possible for inspectors, for use across local governments.

Recommendation 17

In implementing Recommendation 12, the Building Commissioner works with local governments to (at least cost to taxpayers and ratepayers):

- (i) ensure that the training program for inspectors of swimming pool barriers includes specific training on the template swimming pool barrier inspection form and the requirement to complete all elements of the form; and
- (ii) to develop a quality assurance process for ensuring that all elements of swimming pool barrier inspection forms are consistently completed.

Recommendation 18

Taking into account the findings of the Investigation, the Building Commissioner, in consultation with local governments and other stakeholders:

- (i) develops an evidence-based enforcement strategy to improve compliance with the *Building Act 2011* and the *Building Regulations 2012* for use across local governments, taking into account:
 - a. the resourcing available to local governments to implement the enforcement strategy;
 - b. that any regulatory compliance model is done, as a matter of principle, in a cost-beneficial way, that is, at least cost to local governments (and, by extension, to ratepayers); and
 - c. that costs for inspections represent benchmarked efficient costing that is transparently passed on to pool-owning ratepayers who cause these costs to be incurred rather than subsidised by ratepayers who do not own a swimming pool; and
- (ii) determines whether legislative amendments are required to support the effectiveness of the enforcement strategy and, if so, seeks these amendments.

Recommendation 19

The Building Commissioner, in consultation with local governments and other stakeholders:

- (i) includes the use of re-inspection of barriers to swimming pools that do not initially comply with the *Building Regulations 2012*, as part of an evidence-based enforcement strategy to improve compliance with the *Building Act 2011* and the *Building Regulations 2012* for use across local governments; and
- (ii) if necessary, seeks an amendment to the *Building Regulations 2012* to provide a specific basis for these re-inspections.

Recommendation 20

The Building Commissioner, in consultation with local governments and other stakeholders:

- (i) considers a charge for re-inspection of barriers to swimming pools that do not initially comply with the *Building Regulations 2012*, in an evidence-based enforcement strategy to improve compliance with the *Building Act 2011* and the *Building Regulations 2012* for use across local governments; and
- (ii) if necessary, seeks an amendment to the *Building Regulations 2012* to provide the basis for these charges.

Recommendation 21

The Building Commissioner reviews the requirements that are in force in other jurisdictions for temporary barriers, and, informed by cost benefit analysis, explores whether any such requirements should be considered in Western Australia, including those that relate to:

- (i) time limits on temporary barriers; and
- (ii) the need for temporary barriers to be inspected and approved by a building certifier (or equivalent).

Recommendation 22

The Building Commissioner collaborates with relevant state government agencies, local governments and other stakeholders, through a senior working group or other appropriate mechanism, to develop strategies for ensuring compliance by owners of portable swimming pools and spas with the requirements of the *Building Regulations 2012*, including strategies to:

- (i) ensure owners and occupiers are aware of the requirements of regulation 50(1) of the *Building Regulations 2012*, and how these requirements apply to portable swimming pools and spas; and
- (ii) assist local governments to identify when portable swimming pools and spas may require inspection.

Recommendation 23

The Department of Mines, Industry Regulation and Safety considers appropriate community education regarding the specific risks of children drowning in portable pools and spas and the need for these portable pools and spas to comply with the *Building Regulations 2012*, including exploring, subject to appropriate consideration of seeking to limit as far as possible costs imposed on business by regulation, opportunities for retailers and suppliers to inform purchasers at the point of sale of the risks of children drowning in portable pools and spas and the need to comply with legislative requirements.

Recommendation 24

The Building Commissioner promotes to local governments the good practice of conducting random inspections of swimming pools that have been recorded as decommissioned to ensure that these swimming pools have not been recommissioned, and therefore require a swimming pool barrier pursuant to regulation 50(1) of the *Building Regulations 2012*.

Recommendation 25

The Building Commissioner considers an amendment to the *Building Regulations 2012* to remove excluded areas so that regulation 50(1) of the *Building Regulations 2012* applies to all owners and occupiers of premises throughout Western Australia. Alternatively, if such an amendment is not considered appropriate, the Building Commissioner works with relevant local governments in excluded areas to provide accurate advice regarding the need to provide swimming pool barriers as part of the relevant building permit.

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Ombudsman's Foreword

As Western Australian Ombudsman, I have an important responsibility to review certain child deaths, identify patterns and trends arising from these reviews and make recommendations about ways to prevent or reduce child deaths. Of the child death notifications received by my office since I commenced my child death review responsibility, 42 have been deaths of children by drowning.

This investigation aimed to develop an understanding of the deaths of children who died by drowning. Informed by this understanding, the investigation further aimed to examine the actions of local governments and state government departments and authorities in administering the relevant laws of the Western Australian Parliament and relevant regulations and standards. Moreover, the investigation aimed to develop an understanding of non-fatal drowning incidents involving children.

To undertake the investigation, my office conducted an extensive literature review, comprehensively considered 34 deaths of children by drowning notified to the office over a six-year investigation period, surveyed all local governments in Western Australia (to which my office received a 99 per cent response rate), selected five local governments for further investigation, collected and analysed comprehensive information regarding the number of private swimming pools in local government districts and the quality of the swimming pool barrier inspection process, engaged with the (now) Department of Mines, Industry Regulation and Safety, the Building Commissioner, the Department of Health, the (now) Department of Local Government, Sport and Cultural Industries and relevant non-government and not-for-profit organisations.

My office also collected and analysed de-identified information regarding the number of children admitted to a hospital or who attended an emergency department at a hospital following a non-fatal drowning incident. My office found that 258 children were admitted to a hospital and 2,310 children attended an emergency department at a hospital following a non-fatal drowning incident.

I have found that a range of work has been undertaken by the Department of Mines, Industry Regulation and Safety and the Building Commissioner to administer their respective responsibilities in relation to swimming pool safety. I have also found that there is important further work that should be done. This work is detailed in the findings of this report. It will be critical that this work is undertaken with strong cooperation between the Department of Mines, Industry Regulation and Safety, the Building Commissioner, local governments and other key stakeholders, including intra-agency, inter-agency and cross-sectoral arrangements – this is the most efficient and effective way to achieve positive change.

Arising from my findings, I have made 25 recommendations about ways to prevent or reduce deaths of children by drowning. I am very pleased that the Department of Mines, Industry Regulation and Safety and the Building Commissioner have agreed to these recommendations. In keeping with my commitment to Parliament to ensure Parliament is informed about the implementation of my investigations, my office will actively examine the steps taken to give effect to the recommendations and report the results of this examination to Parliament in 2018.

I note my appreciation to the Department of Mines, Industry Regulation and Safety, the Building Commissioner and local governments – their cooperation through the investigation has been particularly positive and reflects their genuine willingness to engage in review, reflection and improvement.

The death of a child by drowning is a tragedy – for a child's life lost and for the parents, families and communities that have been personally affected by the tragic death. It is my sincere hope that the investigation will, through its research and analysis and its recommendations, make a meaningful contribution to the prevention and reduction of this tragic loss of life.

1 Executive Summary

1.1 About the Investigation

The Ombudsman commenced the review of certain child deaths on 30 June 2009 following the passage of the *Parliamentary Commissioner Amendment Act 2009*. The Department of Communities (**Communities**) receives information from the Coroner on reportable deaths of children and notifies the Ombudsman of these deaths. In accordance with the Ombudsman's child death review function, children are defined as those under 18 years of age.

Through the review of the circumstances in which, and why, child deaths occurred, the Ombudsman identified a pattern of cases in which children appeared to have died by drowning. The Ombudsman decided to undertake an investigation into these deaths with a view to determining whether it may be appropriate to make recommendations to any local government or state government department or authority about ways to prevent or reduce deaths of children by drowning (**the Investigation**).

1.1.1 Aims

The Investigation had two aims. First, the Investigation aimed to develop an understanding of the deaths of children who died by drowning and an understanding about the children who were admitted to a hospital or attended an emergency department at a hospital following a non-fatal drowning incident.

Second, informed by this understanding, the Investigation aimed to examine the actions of local governments and state government departments and authorities in administering the relevant laws of the Western Australian Parliament and relevant regulations and standards.

1.1.2 Engagement and consultation

The Office engaged with the following local governments and state government departments and authorities that were the subject of the Investigation:

- all local governments in Western Australia;
- the (then) Department of Commerce (functions relevant to the Investigation now undertaken by the Department of Mines, Industry Regulation and Safety);
- the Department of Health; and
- the (then) Department of Local Government and Communities (functions relevant to the Investigation now undertaken by the Department of Local Government, Sport and Cultural Industries).

The Office also consulted with non-government and not-for-profit organisations and the Coroner's Court of Western Australia.

1.1.3 Information collected

During a six-year period from 1 July 2009 to 30 June 2015 (**the six-year investigation period**), the (then) Department for Child Protection and Family Support (now Communities) notified the Ombudsman regarding children who died in the circumstance of drowning. For the Investigation, the Office examined the deaths of 34 children who had died by drowning. In this report, these children are referred to as **the 34 children who died by drowning**.

To more fully understand patterns and trends in drowning, the Office collected and analysed information regarding all children who were admitted to a hospital or who attended an emergency department at a hospital following a non-fatal drowning incident during the six-year investigation period.

During the six-year investigation period, 258 children were admitted to a hospital following a non-fatal drowning incident. In this report, these children are referred to as **the 258 children who were admitted to a hospital**.

In addition, during the six-year investigation period, 2,310 children attended an emergency department at a hospital following a non-fatal drowning incident. In this report, these children are referred to as **the 2,310 children who attended an emergency department at a hospital**.¹

In order to further examine the responsibilities of local governments, the Office also collected information by:

- surveying all Western Australian local governments regarding the number of private swimming pools within their local government district and their inspection of these private swimming pools; and
- selecting five local governments (**the five selected local governments**) and obtaining from each of them records regarding the inspection of 100 randomly selected private swimming pools, including the inspection history and the most recent inspection form; and
- undertaking structured interviews with officers at the five selected local governments.

1.2 Deaths of children by drowning in Western Australia

1.2.1 Age

The Office found that the average age of the 34 children who died by drowning was four years and four months. Almost three quarters of the 34 children who died by drowning were aged under five years (24 children or 71 per cent). Seventy four per cent (or 191) of the 258 children who were admitted to a hospital and 67 per cent (or 1,542) of the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident were aged under five years.

¹ Children may also have attended a non-hospital based health service such as a general practice or a nursing service following a non-fatal drowning incident.

1.2.2 Aboriginal and Torres Strait Islander children

The Office found that five (15 per cent) of the 34 children who died by drowning were recorded as being Aboriginal and no children were recorded as being Torres Strait Islander.² For comparison, in 2011 Aboriginal and Torres Strait Islander children made up six per cent of children aged zero to 17 years in Western Australia.³

Of the 258 children who were admitted to a hospital, 19 children (7.4 per cent) were recorded as being Aboriginal and/or Torres Strait Islander.

Of the 2,310 children who attended an emergency department at a hospital, 102 children (4.4 per cent) were recorded as being Aboriginal and/or Torres Strait Islander.

Bearing in mind the relatively low numbers of deaths, Aboriginal children were twice as likely to die by drowning as non-Aboriginal children. Aboriginal children were as likely as non-Aboriginal children to be admitted to a hospital and less likely to attend an emergency department following a non-fatal drowning incident.

1.2.3 Location of drowning incident

The Office found that, for 16 (47 per cent) of the 34 children who died by drowning, the fatal drowning incident occurred in a private swimming pool. For 170 (66 per cent) of the 258 children who were admitted to a hospital following a non-fatal drowning incident, the incident occurred in a swimming pool. Data regarding the location of the incident was not available for the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident.

The Office found that for children under one who died by drowning, the incident more frequently occurred in a bath or shower, for children aged from one to four years the incident more frequently occurred in a private swimming pool and for children aged from five to 17 years the incident more frequently occurred in a river, ocean, lake, dam or pond. Of the 24 children aged under five years who died by drowning, 13 (54 per cent) died following an incident in a private swimming pool.

² The Department of Health provided the Office with information about Aboriginal origin of the 34 children who died by drowning. In this respect, the Department of Health records 'Aboriginal not Torres Strait Islander origin,' 'Torres Strait Islander not Aboriginal origin,' 'Not-Aboriginal or Torres Strait Islander origin', 'Other' and 'Unknown'.

³ Developed using the Australian Bureau of Statistics, '2011 Census Counts – Aboriginal and Torres Strait Islander Peoples', *Census of Population and Housing – Counts of Aboriginal and Torres Strait Islander Australians, 2011*, cat. no. 2075.0, ABS, Canberra, June 2012.

1.3 Preventing and reducing deaths of children by drowning

1.3.1 Supervision

In the research literature, child deaths by drowning have been associated with a lack of or lapse in supervision.⁴ The research literature further suggests that children aged under five years of age who are known to be 'in, on, or around the water' (such as a bath, shower or swimming pool) require 'active adult supervision'. 'Active supervision means that a child is being constantly watched by an adult who is within arms' reach at all times'.⁵

The Office found that, of the 34 children who died by drowning:

- none of the six children aged under five years who died by drowning, and who were known to be in, on, or around water, were under active supervision;
- none of the 18 children aged under five years who died by drowning, and who were not known to be in, on, or around water, were under active supervision; and
- of the 10 children aged five years and over who died by drowning, eight children were known to be in, on, or around water, and for six of these children the location of the fatal drowning incident was a river, ocean, lake, dam or pond

1.3.2 **Thirteen children aged under five years who died by drowning in a private swimming pool were not known to be in, on, or around water; a suitable swimming pool barrier may have restricted their access to the swimming pool**

The Office found that, of the 24 children aged under five years who died by drowning, 18 children (75 per cent) were not known to be in, on, or around water. For 13 of these 18 children, the location of the fatal drowning incident was a private swimming pool. The Office also found that while none of these 13 children were under active supervision 'not all drowning deaths are reasonably foreseeable or the result of a breakdown in the elements of supervision occurring for the child. Sometimes a child is not known to be in, on or around water and is being appropriately supervised'.⁶

Swimming pool barriers act as a second line of defence for when a child is not known to be in, on, or around water. The research literature identifies that most fatal drowning incidents in private swimming pools occur where there is no barrier or a faulty barrier between the residence and the swimming pool area.⁷ The Office found that, all of the 13 children aged under five years, not known to be in and around water, who died by drowning in a private swimming pool, died in a private swimming pool with either no barrier, a defective barrier, or a climbable object near the permanent barrier. This highlights the importance of private

⁴ Petrass, L, Blitvich, J, Finch, C. Lack of caregiver supervision: a contributing factor in Australian unintentional child drowning deaths, 2000-2009, *The Medical Journal of Australia*, 2011, 194 (5) pp. 228-231.

⁵ Royal Life Saving Society Australia, *National Drowning Report 2015*, 2015, viewed 15 February 2016, p. 18, <http://www.royallifesaving.com.au/__data/assets/pdf_file/0006/14559/RLS_NDR2015_Report_LR.pdf>.

⁶ Queensland Family and Child Commission, *Annual Report: Deaths of children and young people 2013-14*, 2014, viewed 11 April 2016, <<http://www.qfcc.qld.gov.au/knowledge-and-resource-hub/annual-report-deaths-children-and-young-people-queensland-2013-14>>, p. 45.

⁷ Peden, A, and Mahony, A, *Drowning Deaths of Children Under Five in Private Swimming Pools in NSW: A 13 Year Review*, Royal Life Saving Society – Australia, Sydney, 2016, p. 5.

swimming pools being enclosed by a barrier, which effectively restricts access by young children to the swimming pool.

1.4 Private swimming pools in Western Australia

Where location was known, private swimming pools were the most common location of fatal and non-fatal drowning incidents during the six-year investigation period. The Office found that, for 16 (47 per cent) of the 34 children who died by drowning, the fatal drowning incident occurred in a private swimming pool. Similarly, for 170 (66 per cent) of the 258 children who were admitted to a hospital following a non-fatal drowning incident, the incident occurred in a swimming pool. Accordingly, the Ombudsman determined to examine private swimming pools in Western Australia in more detail.

The Office was unable to identify any source with recent information about the total number and location of private swimming pools in Western Australia, therefore, as part of the Investigation, the Office collected and analysed this information.

The Office surveyed local governments regarding the number of private swimming pools in their local government district as at 30 June 2015 (**the local government survey**). Of the 140 local governments that were surveyed,⁸ 138 (99 per cent) local governments responded to the survey (**the 138 survey respondents**) and two (one per cent) local governments did not respond to the survey. The two local governments that did not respond were small local governments located outside the metropolitan region of Western Australia.

As at 30 June 2015, the 138 survey respondents reported that they had recorded a total of 144,899 private swimming pools. The number of private swimming pools recorded (**recorded private swimming pools**) by each local government is provided at Appendix 1.

1.5 Inspection of private swimming pool barriers by local governments in Western Australia

Recognising the importance of swimming pool barriers in the prevention of drowning, the Western Australian Parliament enacted the relevant provisions of the *Building Act 2011* (which includes provisions for the *Building Regulations 2012*).⁹ The regulatory framework in relation to barriers around private swimming pools¹⁰ establishes requirements for both individuals and local governments, including that:

⁸ At the time of the investigation, there were 138 local governments in Western Australia and two local governments located in the Commonwealth territories of Christmas Island and Cocos (Keeling) Islands that were also included in the survey. The Shire of Narrogin and the Town of Narrogin have merged to form a new and expanded Shire of Narrogin which took effect as of 1 July 2016.

⁹ The *Building Act 2011* provided for the amendment of the *Local Government (Miscellaneous Provisions) Act 1960* and various other Acts of relevance to swimming pools and their barriers. The legislative requirements for public swimming pools differ from private swimming pools and are not investigated in this report.

¹⁰ The legislative requirements for public swimming pools differ from private swimming pools and are not investigated in this report.

- each owner and occupier of premises on which there is a private swimming pool must ensure that a barrier is installed or provided;¹¹
- swimming pool barriers must comply with the requirements specified in the *Building Regulations 2012*;
- local governments are informed of the existence of a private swimming pool through applications for building permits to construct it and through the submission of notices of completion;¹² and
- local governments must arrange for an authorised person to inspect the swimming pool barrier at intervals of no more than four years.¹³

1.5.1 The five selected local governments reported at interview that they estimate that only 30 to 50 per cent of notices of completion for private swimming pools are submitted by builders

Section 9 of the *Building Act 2011* provides that building work must not be done without a building permit, including building work for the construction of private swimming pools. Before a private swimming pool can be built '[s]wimming pools and pool safety barriers require a building permit to be issued by the permit authority ... unless otherwise exempt.'¹⁴

Section 33(1) of the *Building Act 2011* provides that:

33. Notice of completion

- (1) The responsible person in relation to a permit must, within 7 days of completion of the work, or the stage of the work, for which the permit was granted, give notice of completion to a relevant permit authority.

Penalty: a fine of \$10 000.

In this way, local governments are advised that a private swimming pool has been constructed and that the requirements of the *Building Regulations 2012* regarding its barrier and the inspection of its barrier apply.

¹¹ This obligation only applies to owners and occupiers in certain local government districts and areas, as listed in the Table in Schedule 5 of the *Building Regulations 2012* (regulation 49).

¹² This obligation only applies to certain areas and to certain kinds of building work as set out in Schedule 4 of the *Building Regulations 2012* (regulation 41).

¹³ This obligation only applies in certain local government districts and areas as listed in the Table in Schedule 5 of the *Building Regulations 2012* (regulation 49).

¹⁴ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 7.

During the Investigation, the five selected local governments and other stakeholders reported at interview that, in accordance with the legislative requirements discussed above, local governments require that builders or owners submit a notice of completion accompanied by an inspection certificate certifying that the barrier complies with the *Building Regulations 2012*. However, the five selected local governments estimated that only 30 to 50 per cent of notices of completion and the accompanying inspection certificates are submitted by builders or owners, and that, when they are submitted, this rarely happens within the prescribed seven day timeframe.

Aside from the obvious need for compliance with legislative requirements and regulations, a submission of a notice of completion, and the accompanying inspection certificate, is important for at least two practical reasons. First, it ensures that local governments are provided with evidence that the swimming pool barrier complies with the *Building Regulations 2012* upon installation. Second, it informs the local government that the installation of the swimming pool has been completed and this triggers the commencement of the four yearly inspection period for the barrier. The widespread non-compliance reported by the five selected local governments, if accurate, creates the risk that the barriers to private swimming pools will not be inspected on time or at all.

1.5.2 Local governments must arrange for an authorised person to inspect swimming pool barriers at intervals of no more than four years

Regulation 53(1) of the *Building Regulations 2012*¹⁵ requires local governments to arrange for an authorised person to inspect the barrier¹⁶ to a private swimming pool at intervals of no more than four years, to ensure compliance.

During the Investigation, the Office analysed key aspects of the application of the *Building Act 2011* and the *Building Regulations 2012*¹⁷ by local governments. To do so, for each of the five selected local governments, the Office randomly identified 100 private swimming pools from all private swimming pools whose barriers were due for inspection from 1 July 2014 to 30 June 2015, and requested certain records relating to the inspection of these swimming pool barriers (**the inspection records**).

Using the inspection records and information collected through the local government survey, the Office analysed the number and timeliness of inspections undertaken by local governments, the outcomes of inspections, the re-inspection of swimming pool barriers, local governments' enforcement of the *Building Regulations 2012* and charges made for inspections.

¹⁵ Amendments to the *Building Regulations 2012* took effect from 1 May 2016.

¹⁶ Regulation 53(1) was amended by the *Building Amendment Regulations (No 2) 2016*, which came into operation on 1 May 2016. The effect of the amendment was to replace 'pool enclosure' with 'barrier to a private swimming pool'. To avoid confusion, and for consistency, throughout this report, the Office has used the term 'barrier.'

¹⁷ The requirements for swimming pool barriers, which were most recently amended in May 2016, are discussed in detail at section 6.2 of this report.

1.5.3 From 1 July 2014 to 30 June 2015, 51,736 inspections of swimming pool barriers were conducted by 77 local governments

In the local government survey, the Office requested information about the number of inspections conducted from 1 July 2014 to 30 June 2015. The Office found that, of the 138 survey respondents:

- 86 (62 per cent) local governments reported that they undertook inspections from 1 July 2014 to 30 June 2015;
 - 77 (56 per cent) local governments reported that they had conducted a total of 51,736 inspections from 1 July 2014 to 30 June 2015; and
 - nine local governments reported that they had undertaken inspections of an identified number of swimming pools but did not know the total number of inspections conducted in the period;
- 39 (28 per cent) local governments reported that they had conducted no inspections from 1 July 2014 to 30 June 2015;
- 11 (8 per cent) local governments reported that they did not have any swimming pools within their district; and
- two (1 per cent) local governments were unable to provide information about whether they had undertaken any inspections from 1 July 2014 to 30 June 2015.

1.5.4 Four of the five selected local governments had inspected between 12 per cent and 54 per cent of swimming pool barriers due for inspection; records at one local government were not sufficient to allow for this to be determined

The Office analysed the available inspection records to determine if the local government had undertaken an inspection of the swimming pool, and whether the most recent inspection was undertaken within four years of the previous inspection.

The Office found that none of the five selected local governments recorded that they had inspected all swimming pool barriers at intervals of no more than four years, in accordance with regulation 53(1) of the *Building Regulations 2012*. Where records were available, four of the five selected local governments had inspected between 12 per cent and 54 per cent of swimming pool barriers due for inspection at intervals of no more than four years.

1.5.5 Forty-three per cent of the 138 survey respondents self-reported having overdue inspections at 30 June 2015

In the local government survey, the Office requested information about the total number of swimming pool barriers that were overdue for inspection (that is, more than four years had elapsed since the previous inspection). The Office found that 59 (43 per cent) local governments reported that there were a total of 8,639 swimming pools that were overdue for inspection at 30 June 2015.

1.5.6 Between eight and 52 per cent of swimming pool barriers inspected by the five selected local governments did not comply with the *Building Regulations 2012* on initial inspection

In each four yearly inspection, the local government is required to inspect the barrier to determine if the swimming pool complies with the *Building Regulations 2012*

(initial inspection). The Office analysed the inspection records of the 500 randomly selected private swimming pools to determine if, on initial inspection, the swimming pool barriers that had been inspected were found to comply with the *Building Regulations 2012*.

The Office found that two of the five selected local governments had not attempted to inspect all 100 swimming pools in the sample. A total of 485 swimming pools had been inspected (or an attempt had been made to inspect the pool - this occurred for eleven swimming pools that were found to be emptied or removed when visited for inspection). Of the total number of 485 swimming pool barrier inspections and visits conducted, a total of 315 (65 per cent) swimming pool barriers were found by local governments to comply with the *Building Regulations 2012*. The Office found that between eight and 52 per cent of swimming pool barriers inspected by the five selected local governments did not comply with the *Building Regulations 2012* on initial inspection.

The Office also analysed the responses to the local government survey to identify whether this variation in the rate of compliance by swimming pool barriers with the *Building Regulations 2012* among the five selected local governments was consistently reported across Western Australia. Of the 138 survey respondents, 75 survey respondents reported that they had undertaken 37,363 initial inspections between 1 July 2014 and 30 June 2015. Of those 75 local governments, 72 were able to report on how many inspected barriers were found to be compliant at initial inspection. These 72 local governments reported that they had undertaken 26,405 initial inspections, and that 13,358 (51 per cent) of these swimming pool barriers were found to comply at this inspection. The median percentage of swimming pools that were found to be compliant at initial inspection across these 72 local governments was 55 per cent.

1.5.7 Problems with gate latches were the most common reason that swimming pool barriers did not comply with the *Building Regulations 2012* on initial inspection

The Office reviewed the 485 inspection records provided by the five selected local governments to determine the reasons why swimming pool barriers were found not to comply with the *Building Regulations 2012* on initial inspection. Of the 485 swimming pool barriers that were inspected and visited for inspection (including where the inspections did not proceed as the swimming pools were found to be emptied or removed):

- 315 (65 per cent) swimming pool barriers were found to comply with the *Building Regulations 2012* on initial inspection;
- 159 (33 per cent) were found to not comply on initial inspection; and
- 11 swimming pools were found to be emptied or removed so the inspection did not proceed further.

As there can be multiple reasons for a barrier not to comply, a total of 315 reasons were recorded by the five selected local governments in relation to the 159 swimming pool barriers that were found not to comply at initial inspection. The most common reasons for a barrier being found not to comply included:

- gates not self-closing or self-latching (67 of 315 instances or 21 per cent);
- windows in houses (where the house wall forms part of a perimeter fence) opening more than 100mm (44 of 315 instances or 14 per cent); and
- doors in houses (where the house wall forms part of a fence) not self-closing or self-latching (44 of 315 instances or 14 per cent).

1.5.8 One fifth of the reasons that swimming pool barriers did not comply with the *Building Regulations 2012* on initial inspection related to three-sided barriers

For swimming pools installed before 5 November 2001, compliance with the requirements of regulation 50 of the *Building Regulations 2012* may include a wall that contains a door permitting access through a building, if that door satisfies the requirements of the applicable Australian Standard. A barrier constructed in this way is often referred to as a 'three sided barrier'.

As identified above, a total of 315 reasons were recorded by the five selected local governments in relation to 159 swimming pool barriers that were found to not comply with the *Building Regulations 2012* at initial inspection. The Office identified that 61 of the 315 reasons (19 per cent) for a barrier to not comply were associated with the barrier being a 'three-sided barrier'.

1.6 Quality of inspections

Through its literature review of best practice for regulatory inspections, the Office developed an approach to examining the quality of local governments' inspections of swimming pool barriers. In particular, the Office considered the Organisation for Economic Cooperation and Development's (OECD's) *Regulatory Enforcement and Inspections: OECD Best Practice Principles for Regulatory Policy*¹⁸ and the National Association of Testing Authorities' (Australia) *ISO/IEC 17020 Inspection Standard Application Document*.¹⁹ The literature review identified the following key elements as fundamental to a quality inspection process:

- the person undertaking the inspection has the appropriate experience and/or qualifications;²⁰
- inspections are undertaken against a sound framework;²¹ and
- adequate records are kept of the inspections.²²

¹⁸ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, OECD Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>.

¹⁹ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia.

²⁰ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 9.

²¹ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>, p. 12. National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 9.

²² National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 17.

The Office's findings included that:

- there is no specified level of experience or specific qualification for inspectors;
- there is no formal training for new inspectors;
- there is limited continuous professional development for swimming pool barrier inspectors;
- only one of the five selected local governments had a quality assurance process for ensuring consistency of swimming pool barrier inspections across inspectors; and
- none of the five selected local governments identified all elements of the relevant standard on their inspection forms.

1.7 Enforcement of regulation 50(1) of the *Building Regulations 2012*

Well designed and implemented regulatory systems should be cost-beneficial, that is the cost of their design, implementation, and ongoing compliance should be outweighed by the benefits of the regulations.²³ Similarly, regulatory design should actively avoid any unintended undesirable consequences of the regulation.²⁴ The research literature identifies factors that are known to drive compliance with regulations. In particular, the 'Table of Eleven', published by the OECD, 'derives from academic literature in the areas of social psychology, sociology and criminology.'²⁵ The Table of Eleven identifies factors that increase the likelihood of compliance, as follows:

- Aspects of spontaneous compliance:
 1. Knowledge of the regulation
 2. Costs of compliance/benefits of non-compliance.
 3. Degree of business and popular acceptance of the regulation
 4. Loyalty and natural obedience of the regulated firm
 5. Extent of informal monitoring
- Aspects of monitoring
 6. Probability of report through informal channels
 7. Probability of inspection
 8. Probability of detection
 9. Selectivity of the inspector
- Aspects of sanctions
 10. Chance of sanctions
 11. Severity of sanctions²⁶

With respect to compliance with regulation 50(1) of the *Building Regulations 2012*, legislation and regulations specifically provide local governments with three enforcement measures to encourage and achieve compliance:

- issuing infringement notices;
- prosecution; and
- issuing building orders.

²³ Field, C, Recent Evolutions in Australian Ombudsmen, *AIAL Forum*, 2009, 63, pp. 4-12.

²⁴ Field, C, Recent Evolutions in Australian Ombudsmen, *AIAL Forum*, 63, 2009pp. 4-12.

²⁵ Organisation for Economic Cooperation and Development, *Better Regulation in Europe: Netherlands*, OECD, Paris, 2010, p. 109.

²⁶ Hampton, P, *Reducing administrative burdens: effective inspection and enforcement*, HM Treasury, 2005, Norwich, p. 57.

Each of these measures is discussed in more detail below.

1.7.1 Nine of the 138 survey respondents reported having issued a total of 77 infringement notices for non-compliant swimming pool barriers between 1 July 2014 and 30 June 2015

In the local government survey, the Office requested information about whether the local government had issued an infringement notice from 1 July 2014 to 30 June 2015 for swimming pool barriers that did not comply with regulation 50(1) of the *Building Regulations 2012*. The Office found that, of the 138 survey respondents:

- one hundred and eight (78 per cent) local governments reported that they had not issued any infringement notices;
- nine (seven per cent) local governments reported that they had issued infringement notices;
- ten (seven per cent) local governments did not know if they had issued infringement notices;²⁷ and
- eleven (eight per cent) local governments reported that they did not have any recorded swimming pools in their district.

The nine local governments that reported that they had issued infringement notices for swimming pool barriers that did not comply with regulation 50(1) of the *Building Regulations 2012* reported that they had issued a total of 77 infringement notices between 1 July 2014 and 30 June 2015.

1.7.2 Six local governments reported having commenced proceedings to prosecute owners on seven occasions for non-compliant swimming pool barriers from 1 July 2014 and 30 June 2015

The Office found that, of the 138 survey respondents:

- six (four per cent) local governments reported that they had commenced a total of seven prosecutions between 1 July 2014 and 30 June 2015;
- 123 (89 per cent) local governments reported that they had not commenced any prosecutions between 1 July 2014 and 30 June 2015 (including 11 local governments that did not have any recorded swimming pools in their district); and
- nine (seven per cent) local governments reported that they did not know whether they had commenced prosecutions between 1 July 2014 and 30 June 2015.

²⁷ This includes the City of Rockingham, which was not asked this question as it took part in a pilot of the survey.

1.7.3 Local governments reported that building orders are more effective than infringement notices or prosecutions in achieving compliance with regulation 50(1) of the *Building Regulations 2012*

During the Investigation, local governments informed the Office that, as an alternative to infringement notices and prosecutions for offences pursuant to regulation 50(1) of the *Building Regulations 2012*, local governments may make building orders in relation to swimming pool barriers.

One of the five selected local governments (the City of Canning) stated that it had issued one building order from 1 July 2014 to 30 June 2015. The City of Canning informed the Office that it had issued a building order rather than prosecuting the owner as the maximum penalty for a first offence for failing to comply with a building order is \$50,000 compared with \$5,000 for failing to comply with regulation 50(1) of the *Building Regulations 2012*.

In response to questions regarding enforcement, two of the 138 survey respondents also stated that they issue building orders, rather than infringement notices, when a swimming pool barrier is found not to comply with regulation 50(1) of the *Building Regulations 2012*. These local governments also reported that building orders are more effective in ensuring compliance because of the higher maximum penalties.

1.7.4 Local governments have used the re-inspection process effectively as a persuasive enforcement measure

The *Building Regulations 2012* do not require local governments to undertake a re-inspection if a swimming pool barrier does not comply with the *Building Regulations 2012* on initial inspection.

The Office found that, if a swimming pool barrier does not comply with the *Building Regulations 2012* at the time of the initial inspection, the local government may re-inspect the barrier at a later date to determine if the barrier complies (**the first re-inspection**). If the barrier does not comply on the first re-inspection, the local government may undertake a second re-inspection (**the second re-inspection**) and so on, until compliance is achieved or the local government ceases to re-inspect.

The Office analysed the 485 inspection forms obtained from the five selected local governments to determine if barriers that were found not to comply with the *Building Regulations 2012* on initial inspection were subsequently re-inspected. Of the 485 barriers inspected, 159 swimming pool barriers were found not to comply on initial inspection. The Office analysed the inspection records of these 159 swimming pool barriers to determine whether a re-inspection was undertaken. The Office found that 128 of the 159 barriers were re-inspected (81 per cent).

The Office undertook further analysis to determine whether the re-inspections resulted in compliance with the *Building Regulations 2012*. Overall, the Office found that the re-inspection process increased the percentage of private swimming pools that ultimately complied with the *Building Regulations 2012*. The Office's findings indicate that the re-inspection process is being used effectively by some local governments as a persuasive enforcement measure to improve compliance with regulation 50(1) of the *Building Regulations 2012*.

1.7.5 Collectively, 84 sanctions were issued by local governments in response to 13,047 potential offences pursuant to regulation 50(1) of the *Building Regulations 2012*; this equates to a 1 in 155 chance of a sanction being imposed

In relation to the chance of sanctions, the Office found that 72 local governments reported that of 26,405 initial inspections they identified 13,047 swimming pool barriers that did not comply with regulation 50(1) of the *Building Regulations 2012*. However, sanctions were rarely imposed, with the 138 survey respondents reporting that, in the same period, they:

- issued a total of 77 infringement notices; and
- commenced proceedings to prosecute owners on seven occasions.

Collectively, this indicates that 84 sanctions were imposed by local governments in response to 13,047 potential offences pursuant to regulation 50(1) of the *Building Regulations 2012* (that is, in response to 0.7 per cent of potential offences). The probability of a sanction being imposed was one in 155.

1.8 Swimming pool barriers that may not be inspected by local governments

During the Investigation, the Office identified that there were certain types, and some locations, of private swimming pools whose barriers may not be, or are not required to be, inspected by local governments. The following types of private swimming pool barriers were identified by the Office as being at increased risk of not being inspected:

- temporary barriers for swimming pools that are in the process of being installed, including swimming pools that need to be filled with water during installation;
- barriers for types of swimming pools that can be constructed without a building permit, particularly portable pools and spas; and
- barriers for swimming pools that have been decommissioned and then filled with water again.

In addition, local governments are only required to inspect barriers for swimming pools in geographical areas of Western Australia where Division 2 of Part 8 of the *Building Regulations 2012* applies.

2 About the Investigation

2.1 The Western Australian Ombudsman

2.1.1 The Ombudsman

The Ombudsman is an independent and impartial statutory officer who reports directly to Parliament, rather than the government of the day.

2.1.2 The role of the Ombudsman

The Ombudsman has functions in relation to the investigation of state government departments, local governments and universities. These investigations may arise from complaints received by the Ombudsman, of the Ombudsman's own motion or by reference from Parliament.

The Ombudsman also has an important function to review certain child deaths and family and domestic violence fatalities as well as a range of additional functions, as set out in legislation, including inspection, monitoring, scrutiny and reporting.

2.1.3 The Ombudsman's child death review function

The Ombudsman commenced the review of certain child deaths on 30 June 2009 following the passage of the *Parliamentary Commissioner Amendment Act 2009*. The Ombudsman reviews investigable child deaths. Section 19A(3) of the *Parliamentary Commissioner Act 1971* (**the Act**) defines an investigable death as follows:

An investigable death occurs if a child dies and any of the following circumstances exists –

- (a) in the 2 years before the date of the child's death, the CEO [the Interim Chief Executive Officer of Department of Communities] had received information that raised concerns about the wellbeing of the child or a child relative of the child;
- (b) in the 2 years before the date of the child's death, the CEO, under section 32(1) of the CCS Act [Children and Community Services Act 2004], had determined that action should be taken to safeguard or promote the wellbeing of the child or a child relative of the child;
- (c) in the 2 years before the date of the child's death, any of the actions listed in section 32(1) of the CCS Act was done in respect of the child or a child relative of the child;
- (d) protection proceedings are pending in respect of the child or a child relative of the child;
- (e) the child or a child relative of the child is in the CEO's care.

For these investigable deaths, the Ombudsman's functions are outlined in section 19B(3) of the Act, as follows:

- (a) to review the circumstances in which and why the deaths occurred;
- (b) to identify any patterns or trends in relation to the deaths;
- (c) to make recommendations to any department or authority about ways to prevent or reduce investigable deaths.

The Department of Communities (**Communities**) receives information from the Coroner on reportable deaths of children and notifies the Ombudsman of these deaths. The notification provides the Ombudsman with a copy of the information provided to Communities by the Coroner about the circumstances of the child's death together with a summary outlining the past involvement of Communities with the child.

The Ombudsman assesses all child death notifications received to determine if the death is, or is not, an investigable death. If the death is an investigable death, it must be reviewed. If the death is a non-investigable death, it can be reviewed. The extent of a review depends on a number of factors, including the circumstances surrounding the child's death and the level of involvement of Communities or other public authorities in the child's life. Confidentiality of the child, family members and other persons involved with the case is strictly observed.

The child death review process is intended to identify key learnings that will positively contribute to ways to prevent or reduce child deaths. The review does not set out to establish the cause of the child's death; this is properly the role of the Coroner.

2.2 About the Investigation

2.2.1 Rationale

Through the review of the circumstances in which, and why, child deaths occurred, the Ombudsman identified a pattern of cases in which children appeared to have died by drowning. In accordance with the Ombudsman's child death review function, children are defined as those under 18 years of age. The Ombudsman decided to undertake an investigation into these deaths with a view to determining whether it may be appropriate to make recommendations to any local government or state government department or authority about ways to prevent or reduce deaths of children by drowning (**the Investigation**).

2.2.2 Definition of drowning

Following consultation with international experts in clinical medicine, prevention and rescue at the World Congress on Drowning in 2002, the World Health Organization (**WHO**) formulated the following definition of drowning and adopted the definition in 2005:

Drowning is the process of experiencing respiratory impairment from submersion/immersion in liquid.²⁸

The international consensus at the World Congress on Drowning was that this 'new definition should include both cases of fatal and non-fatal drowning' and that '[d]rowning outcomes should be classified as: death, morbidity, and no morbidity.'²⁹

Accordingly, as part of the Investigation, the office of the Ombudsman (**the Office**) has analysed information about children who died by drowning and information about children who were admitted to a hospital or attended an emergency department at a hospital following a non-fatal drowning incident.

2.2.3 Aims and objectives

2.2.3.1 Aims

The Investigation had two aims. First, the Investigation aimed to develop an understanding of the deaths of children who died by drowning and an understanding about the children who were admitted to a hospital or attended an emergency department at a hospital following a non-fatal drowning incident.

Second, informed by this understanding, the Investigation aimed to examine the actions of local governments and state government departments and authorities in administering the relevant laws of the Western Australian Parliament and relevant regulations and standards, more particularly, the *Building Act 2011*, the *Building Regulations 2012* and the *Australian Standard 1926.1 – 1993 Swimming Pool Safety Part 1: Fencing for swimming pools (AS 1926.1-1993)*, which relevantly regulated the inspection of swimming pool barriers at the time of the Investigation. Where relevant, the Investigation took into account the amendments to the *Building Regulations 2012* that took effect from 1 May 2016 and 9 August 2017, and the updated *Australian Standard Swimming Pool Safety Part 1: – Safety Barriers for Swimming Pools (AS 1926.1-2012)*.

²⁸ van Beeck, E, Branche, C, Szpilman, D, Modell, J, and Bierens, J. 'A new definition of drowning: towards documentation and prevention of a global public health problem.' *Bulletin of the World Health Organization*. Volume 83, Number 11, November 2005, p. 853, viewed 19 December 2016, <<http://www.who.int/bulletin/volumes/83/11/vanbeeck1105abstract/en/>>.

²⁹ van Beeck, E, Branche, C, Szpilman, D, Modell, J, and Bierens, J. 'A new definition of drowning: towards documentation and prevention of a global public health problem.' *Bulletin of the World Health Organization*. Volume 83, Number 11, November 2005, p. 853, viewed 19 December 2016, <<http://www.who.int/bulletin/volumes/83/11/vanbeeck1105abstract/en/>>.

2.2.3.2 Objectives

The objectives of the Investigation were to:

- provide a detailed, de-identified profile of children who died by drowning or were admitted to a hospital or attended an emergency department at a hospital, following a non-fatal drowning incident in Western Australia,³⁰ over a six-year period from 1 July 2009 to 30 June 2015 (**the six-year investigation period**);
- provide a detailed understanding of the circumstances of the deaths of children who died by drowning, and the circumstances of the admission of children to a hospital or attendance at an emergency department at a hospital by children following a non-fatal drowning incident in Western Australia, in the six-year investigation period;
- identify patterns and trends among contributory factors to fatal and non-fatal drowning incidents involving children in Western Australia;
- taking into account the findings regarding the patterns and trends among contributory factors, analyse how effectively local governments and state government departments and authorities were implementing the requirements of the *Building Act 2011*, the *Building Regulations 2012* and AS 1926.1-1993, with respect to the inspection of swimming pool barriers, to prevent or reduce deaths of children by drowning; and
- based on this analysis, determine whether it may be appropriate to make recommendations to any local government or state government department and authority to prevent or reduce deaths of children by drowning.

2.2.4 Methodology

To undertake the Investigation, the Office:

- conducted a literature review;
- engaged with the local governments and state government departments and authorities that were the subject of the Investigation;
- consulted with non-government and not-for-profit organisations and the Coroner's Court of Western Australia;
- collected and analysed qualitative and quantitative information;
- developed a preliminary view and provided it to relevant local governments and state government departments and authorities for their consideration and response; and
- developed a final view including findings and recommendations.

2.2.4.1 Literature review

The Office conducted a review of relevant state, national and international literature regarding drowning generally, as well as literature specific to the inspection of private swimming pools by local governments. Throughout this report, the information drawn from this review is referred to as **the research literature**.

³⁰ Where a child has been included as being admitted to a hospital following a non-fatal drowning incident, they have not also been included as attending an emergency department at a hospital, even if this also occurred. Similarly, where a child has been included as having died by drowning, they have not also been included as being admitted to a hospital or attending an emergency department at a hospital, even if this also occurred. This approach was chosen so as to focus the Office's analysis on the most serious consequence of the fatal or non-fatal drowning incident.

2.2.4.2 *Engagement*

The Office engaged with the following local governments and state government departments and authorities that were the subject of the Investigation:

- all local governments in Western Australia;
- the (then) Department of Commerce (functions relevant to the Investigation now undertaken by the Department of Mines, Industry Regulation and Safety);
- the Department of Health; and
- the (then) Department of Local Government and Communities (functions relevant to the Investigation now undertaken by the Department of Local Government, Sport and Cultural Industries).

2.2.4.3 *Consultation*

The Office consulted with the following non-government and not-for-profit organisations:

- Kidsafe WA;
- The (then) Local Government Managers Australia – WA, now Local Government Professionals;
- Master Builders Association of Western Australia;
- Royal Australasian College of Physicians;
- Royal Life Saving Society Western Australia Inc;
- St John Ambulance Western Australia Ltd;
- Swimming Pool and Spa Association of Western Australia;
- Telethon Kids Institute;
- Western Australian Local Government Association; and
- Western Australian Swimming Association Inc.

The Office also consulted with the Coroner's Court of Western Australia.

2.2.4.4 *Information collection and analysis*

Children whose deaths by drowning were notified to the Ombudsman

During the six-year investigation period, the (then) Department for Child Protection and Family Support (now Communities) notified the Ombudsman regarding children who died in the circumstance of drowning. For the Investigation, the Office examined the deaths of 34 children who had died by drowning. In this report, these children are referred to as **the 34 children who died by drowning**.

The 34 children who died by drowning do not include children whose deaths occurred in the circumstance of drowning but the Coroner found the cause of death to involve suicide, homicide or a car accident. The 34 children who died by drowning also do not include the eight children who died in the Suspected Illegal Entry Vessel 221 boat tragedy off the coast of Christmas Island in December 2010.

For each of the 34 children who died by drowning, the Office received information from local governments, state government departments and authorities and was provided information by the Coroner's Court of Western Australia.

Children who were admitted to a hospital or who attended an emergency department at a hospital as a result of a non-fatal drowning incident

To more fully understand patterns and trends in drowning, the Office collected and analysed information regarding all children who were admitted to a hospital or who attended an emergency department at a hospital following a non-fatal drowning incident during the six-year investigation period.

Private swimming pools and their inspection

In order to further examine the responsibilities of local governments, the Office also collected information by:

- surveying all Western Australian local governments regarding the number of private swimming pools within their local government district and their inspection of these private swimming pools;
- selecting five local governments (**the five selected local governments**) and obtaining from each of them records regarding the inspection of 100 randomly selected private swimming pools, including the inspection history and the most recent inspection form; and
- undertaking structured interviews with officers at the five selected local governments.

The Office analysed the information collected using qualitative and quantitative analytical methods that led to draft findings. The Office engaged with the local governments and state government departments and authorities that were the subject of the Investigation, and consulted with stakeholders regarding the results of this analysis and draft findings.

2.2.4.5 Preliminary view

The Office provided the local governments and state government departments and authorities with the relevant parts of our draft findings and draft recommendations for their consideration and response.

2.2.4.6 Final view

Having considered the responses of state government departments and authorities, the Office prepared this final report of the Investigation, including findings and recommendations, to be tabled in the Western Australian Parliament.

3 Deaths of children by drowning in Western Australia

As discussed in Chapter 2, in 2005, the WHO adopted a definition of drowning, which incorporated both fatal and non-fatal drowning incidents.

It is widely acknowledged that the full impact of drowning is not limited to drowning deaths. An ongoing long-term Australian study shows:

...in about 20% of drowning with or without morbidity there is some form of long term behavioural and learning impairment and in 10% of cases there is severe neurological deficit.³¹

In 2010, Moran explored the inclusion of both fatal and non-fatal drowning incidents in the WHO definition of drowning, as follows:

Fatal and non[-]fatal drowning statistics are often used in drowning prevention advocacy as indicators of the magnitude of the problem and its cost to society ... It has been estimated that for each fatal drowning, between one and four non[-]fatal events are serious enough to warrant hospitalization...The true extent of submersion incidents that may precipitate or constitute a drowning episode is probably much higher than estimates based on mortality and morbidity alone.³²

...

Little is known about those victims who experience a life-threatening incident yet are never reported as “public health” or “rescue” statistics.³³

To illustrate this broader concept of drowning, Moran refers to the widely used ‘iceberg phenomenon’ model, developed by Schuman, Rowe, Glazer and Redding,³⁴ who:

... used the visual metaphor of an iceberg to explore just how many people are subjected to serious risk of drowning without necessarily experiencing submersion, aspiration, or hypoxia ... The illustration identifies mortality and morbidity as the visual tip of the iceberg above water, underpinned below the water surface by rescue statistics, and nonreported, no-morbidity drowning episodes that further define the extent of risk of drowning.³⁵

Taking into account the definition of drowning adopted by the WHO and the broader concept of drowning illustrated by the ‘iceberg phenomenon’ (Figure 1), as part of the Investigation the Office collected and analysed information regarding both fatal and non-fatal drowning incidents. These are discussed immediately below and in the following Chapters of the report.

³¹ The Centre for Trauma Care, prevention Education and Research, and Kids Health, *The NSW Study of Drowning and Near Drowning in children (0-16)*. The Children’s Hospital at Westmead, 2015, p. 3.

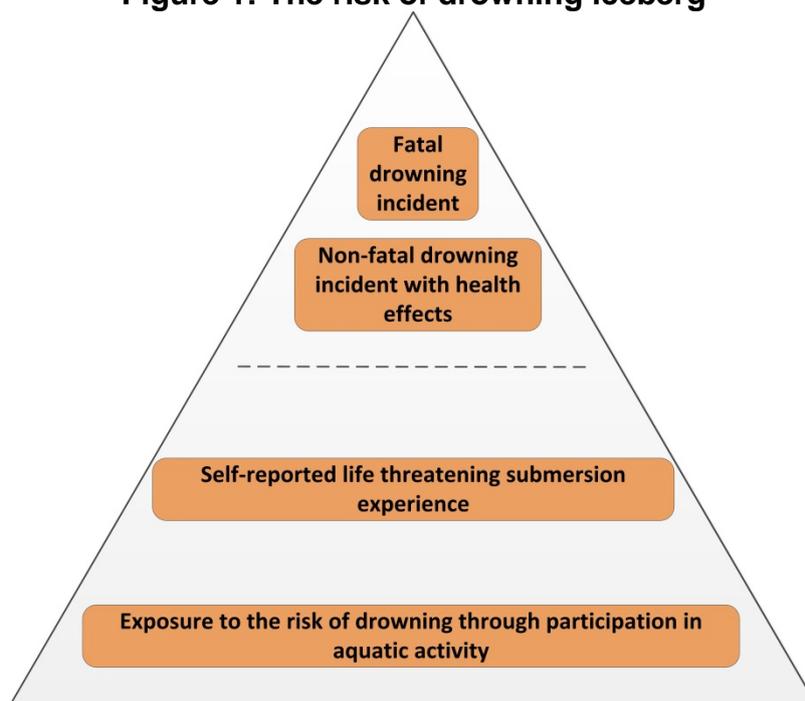
³² Moran K, Risk of Drowning: The “Iceberg Phenomenon” Revisited, *International Journal of Aquatic Research and Education*, 2010, 4, p. 115, citing Meyer, R, Theodorou, A., & Berg, R, ‘Childhood drowning’, *Pediatrics in Review*, 27, 2006, pp. 163-169.

³³ Moran K, Risk of Drowning: The “Iceberg Phenomenon” Revisited, *International Journal of Aquatic Research and Education*, 2010, 4, p. 115.

³⁴ Schuman, S H, Rowe, J R, Glazer, H M and Redding, J S, ‘Risk of drowning: An iceberg phenomenon’, *Journal of the American College of Emergency Physicians*, 1977, 6, pp. 139-143.

³⁵ Moran K, Risk of Drowning: The “Iceberg Phenomenon” Revisited, *International Journal of Aquatic Research and Education*, 2010, 4, p. 116.

Figure 1: The risk of drowning iceberg



Source: Adapted by Ombudsman Western Australia from: Schuman, S, Rowe, J, Glazer, H and Redding, J.³⁶

3.1 Prevalence and incidence of fatal and non-fatal drowning incidents in Western Australia

3.1.1 Fatal and non-fatal drowning incidents in Western Australia

According to the Australian Bureau of Statistics (ABS), in 2015, one child died by drowning in Western Australia.³⁷

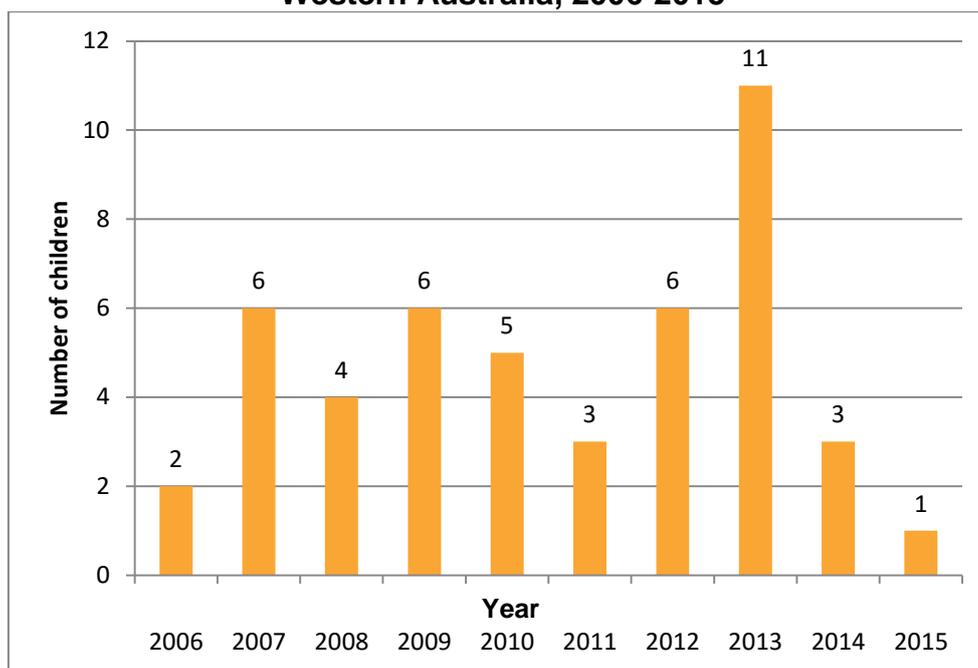
The number of children who died by drowning in Western Australia between 2006 and 2015 ranged from one child to 11 children each year (Figure 2).³⁸

³⁶ Schuman, S, Rowe, J, Glazer, H and Redding, J, 1977, 'Risk of drowning: An iceberg phenomenon', *Journal of American College of Emergency Physicians*, 19977, 6, p. 139-143.

³⁷ Australian Bureau of Statistics, *Causes of Death Data, Australia*, customised report, ABS, Canberra, 2017.

³⁸ Australian Bureau of Statistics, *Causes of Death Data, Australia*, customised report, ABS, Canberra, 2017.

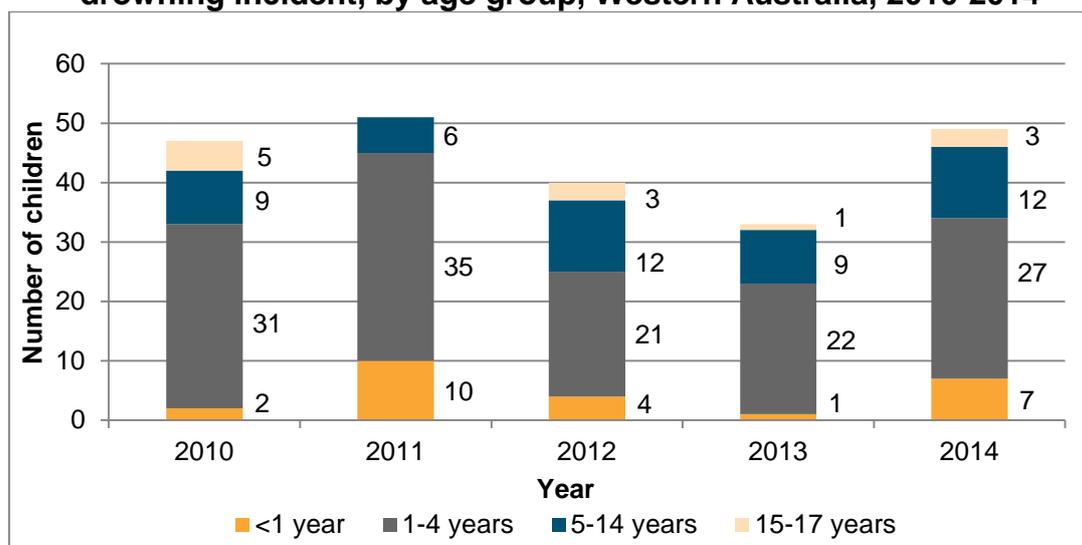
Figure 2: Number of children who died by drowning, Western Australia, 2006-2015



Source: Ombudsman Western Australia and Australian Bureau of Statistics

To more fully understand patterns and trends in drowning, the Office collected and analysed information regarding all children who were admitted to a hospital following a non-fatal drowning incident during the six-year investigation period. The Office found that in the calendar year 2014, in Western Australia, 49 children were admitted to a hospital following a non-fatal drowning incident. Thirty four of these 49 children were under the age of five years, which was more than double the number of children aged between five and 17 years who were admitted to a hospital in the same year (15 children).

Between 2010 and 2014, the number of children admitted to a hospital following a non-fatal drowning incident in Western Australia ranged from 33 children (in 2013) to 51 children (in 2011) (Figure 3).

Figure 3: Number of children admitted to a hospital following a non-fatal drowning incident, by age group, Western Australia, 2010-2014

Source: Ombudsman Western Australia

3.1.2 Fatal and non-fatal drowning incidents in Australia

To enable the Western Australian figures to be considered in context, this section provides comparable figures for Australia as a whole, as well as those individual Australian states for which this information is reported.³⁹

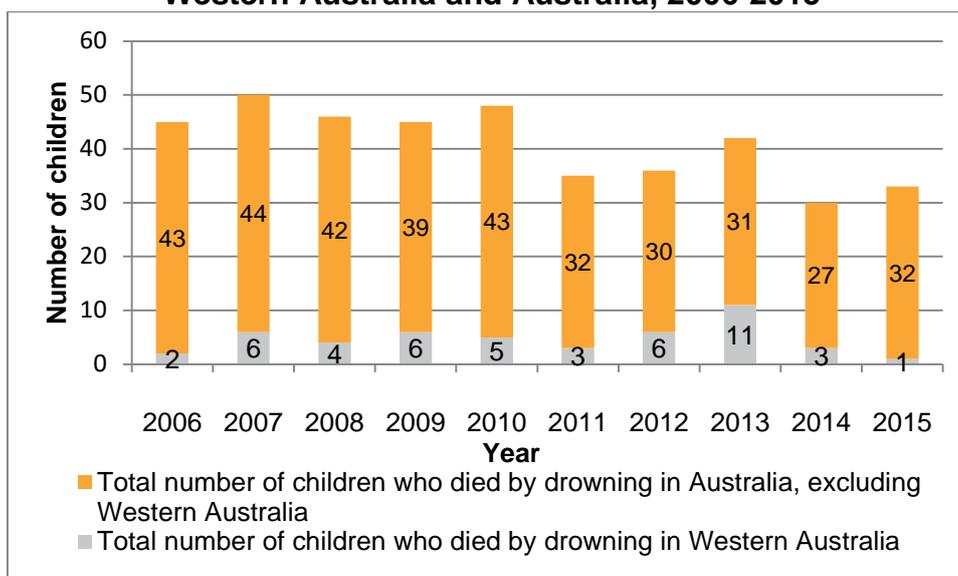
In 2015, in Australia, 33 children died by drowning. Twenty three of these 33 children were aged between zero and four years and nine were aged between five and 14 years.⁴⁰ The number of children who died by drowning in Australia between 2006 and 2015 is shown below (Figure 4).⁴¹

³⁹ The Australian Bureau of Statistics reports that data 'with very small counts may potentially result in an individual being identified'. In these instances, the Australian Bureau of Statistics randomly assigns 'small values to protect the confidentiality of individuals'. The Office has therefore excluded these states and territories from its reporting. Australian Bureau of Statistics, *Causes of Death Data, Australia*, customised report, ABS, Canberra, 2017.

⁴⁰ The Australian Bureau of Statistics reports that data 'with very small counts may potentially result in an individual being identified'. In these instances, the Australian Bureau of Statistics randomly assigns 'small values to protect the confidentiality of individuals'. The Office has therefore not reported on the number of children who died by drowning aged between 15 and 17 years. Australian Bureau of Statistics, *Causes of Death Data, Australia*, customised report, ABS, Canberra, 2017.

⁴¹ Australian Bureau of Statistics, *Causes of Death Data, Australia*, customised report, ABS, Canberra, 2017.

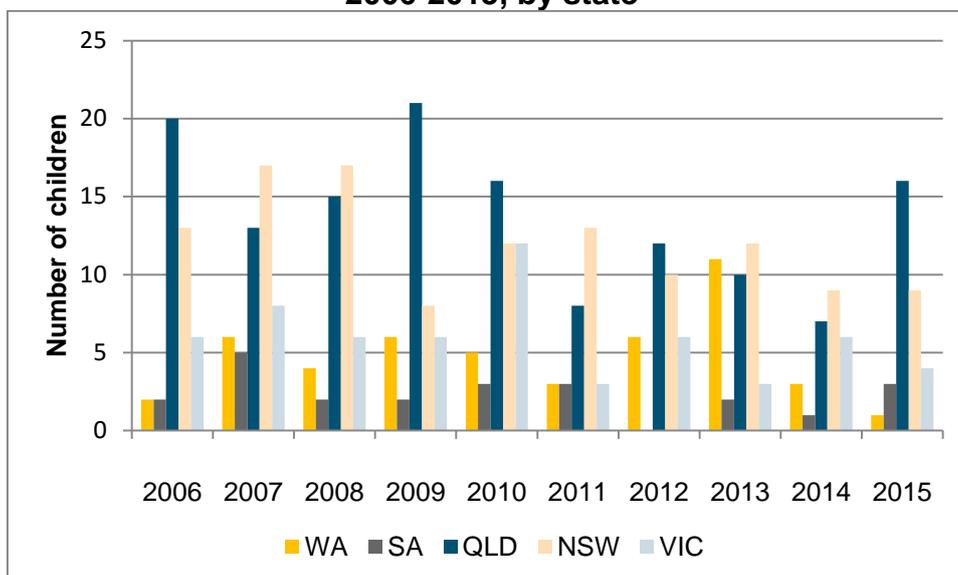
Figure 4: Number of children who died by drowning, Western Australia and Australia, 2006-2015



Source: Ombudsman Western Australia and Australian Bureau of Statistics

Figure 5 shows the number of children who died by drowning over the period 2006 to 2015, for Western Australia and some other Australian states.⁴²

Figure 5: Number of children who died by drowning, 2006-2015, by state



Source: Ombudsman Western Australia and Australian Bureau of Statistics

⁴² The Australian Bureau of Statistics reports that data 'with very small counts may potentially result in an individual being identified'. In these instances, the Australian Bureau of Statistics randomly assigns 'small values to protect the confidentiality of individuals'. The Office has therefore excluded these states and territories from its reporting. Australian Bureau of Statistics, *Causes of Death Data, Australia*, customised report, ABS, Canberra, 2017.

Information regarding the number of children admitted to a hospital following a non-fatal drowning incident for Australia as a whole and for other Australian states and territories was not publicly available.

3.2 Children involved in fatal and non-fatal drowning incidents during the six-year investigation period

Chapter 2 identifies that the Office analysed the 34 deaths in which a child had died by drowning during the six-year investigation period and that these children are referred to as **the 34 children who died by drowning**.

To better understand patterns and trends in drowning, bearing in mind the WHO's definition of drowning, the Office also collected and analysed information about children in Western Australia who, during the six-year investigation period, had:

- been admitted to a hospital as a result of a non-fatal drowning incident; or
- attended an emergency department at a hospital as a result of a non-fatal drowning incident.

During the six-year investigation period, 258 children were admitted to a hospital following a non-fatal drowning incident. In this report, these children are referred to as **the 258 children who were admitted to a hospital**.

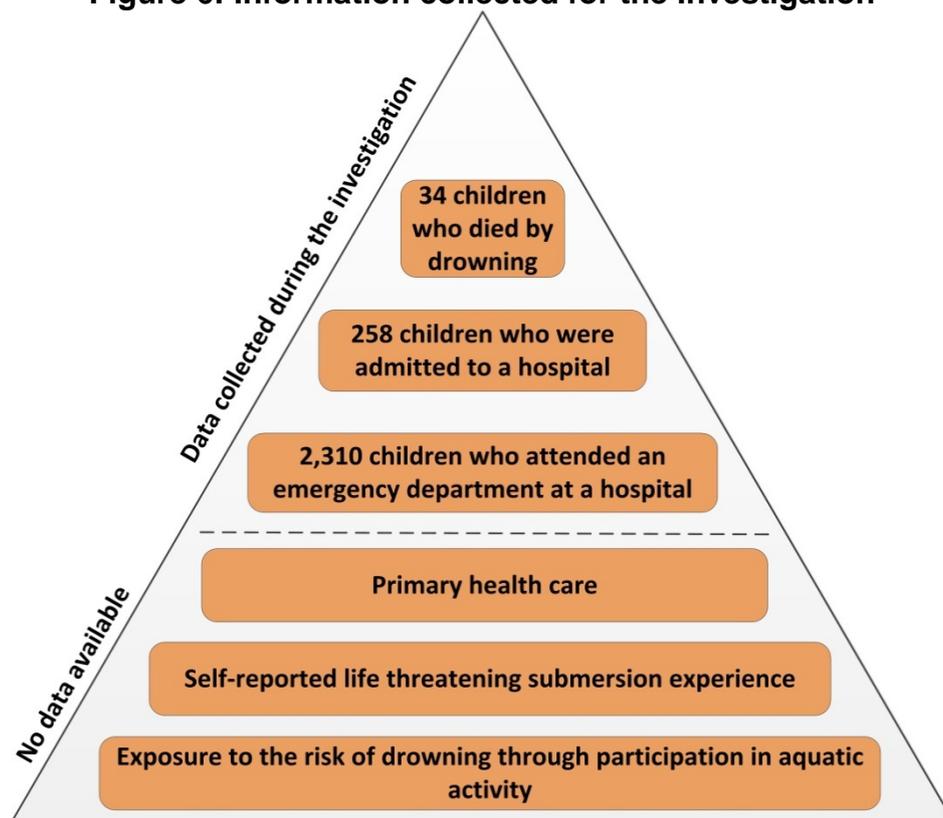
In addition, during the six-year investigation period, 2,310 children attended an emergency department at a hospital following a non-fatal drowning incident. In this report, these children are referred to as **the 2,310 children who attended an emergency department at a hospital**.⁴³

Where a child has been included as being admitted to a hospital following a non-fatal drowning incident, they have not also been included as attending an emergency department at a hospital, even if this also occurred. Similarly, where a child has been included as having died by drowning, they have not also been included as being admitted to a hospital or attending an emergency department at a hospital, even if this also occurred. This approach was chosen so as to focus the Office's analysis on the most serious consequence of the fatal or non-fatal drowning incident.

The information collected during the Investigation is depicted below using the Schuman et al. 'iceberg phenomenon' model of the risk of drowning (Figure 6).

⁴³ Children may also have attended a non-hospital based health service such as a general practice or a nursing service following a non-fatal drowning incident.

Figure 6: Information collected for the Investigation



Source: Adapted by Ombudsman Western Australia from: Schuman, S, Rowe, J, Glazer, H and Redding, J.⁴⁴ Note: No data is available for self-reported life threatening submersion experiences however some of these experiences are reported to friends and family or reported through surveys of sample populations.

In summary, 34 children died by drowning, 258 children were admitted to a hospital and 2,130 children attended an emergency department at a hospital (but were not admitted) following a non-fatal drowning incident, during the six-year investigation period.

3.2.1 Age

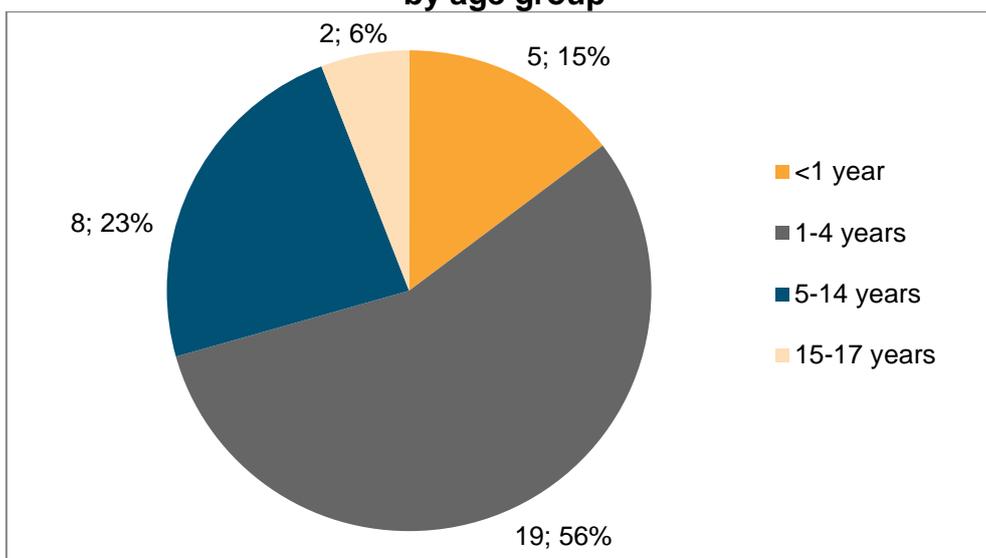
The Office found that the average age of the 34 children who died by drowning was four years and four months. Almost three quarters of the 34 children who died by drowning were aged under five years (24 children or 71 per cent). Five of the 34 children who died by drowning were aged less than one year, 19 were aged between one and four years, eight were aged between five and 14 years and two were aged between 15 and 17 years (Figure 7).

These findings are consistent with the research literature, which identifies that, in Australia '[c]hildren aged 0 – 4 years had the highest rate of drowning'.⁴⁵

⁴⁴ Schuman, S, Rowe, J, Glazer, H and Redding, J, 1977, 'Risk of drowning: An iceberg phenomenon', *Journal of American College of Emergency Physicians*, 1997, 6, p139-143.

⁴⁵ Franklin, R, Scarr, J and Pearn, J, 'Reducing drowning deaths: the continued challenge of immersion fatalities in Australia', *Medical Journal of Australia*, 192, 3, 2010, pp. 123.

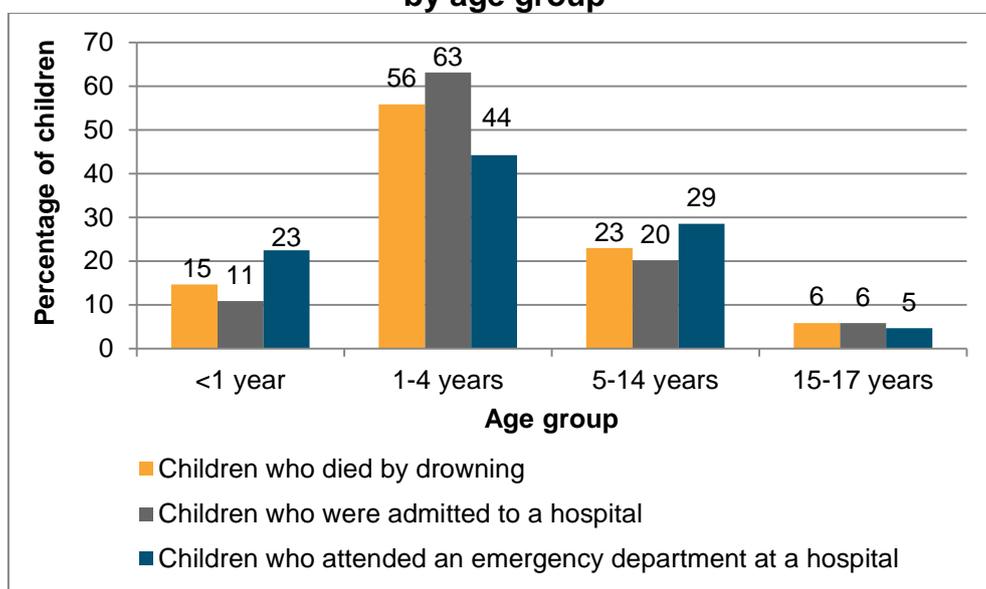
Figure 7: Number of children who died by drowning, by age group



Source: Ombudsman Western Australia

As shown in Figure 8, 74 per cent (or 191) of the 258 children who were admitted to a hospital and 67 per cent (or 1,542) of the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident were aged under five years.

Figure 8: Percentage of children who died by drowning, who were admitted to a hospital or who attended an emergency department at a hospital following a non-fatal drowning incident, by age group



Source: Ombudsman Western Australia

Note: Percentages do not add to 100 due to rounding.

Overall, the Office found that almost three quarters of the children who died by drowning or were admitted to a hospital following a non-fatal drowning incident, and two thirds of children who attended an emergency department following a non-fatal drowning incident were aged under five years.

3.2.2 Sex

The Office found that, of the 34 children who died by drowning, 23 (68 per cent) were male and 11 (32 per cent) were female.

This finding is consistent with the research literature which has found that male children had a higher rate of death by drowning than female children and that this disparity increases with age, as follows:

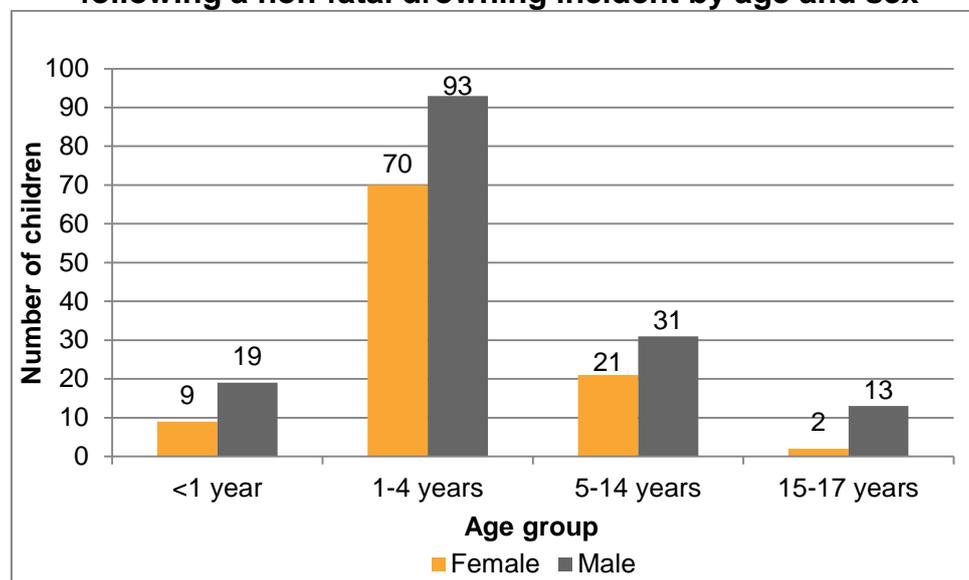
Between 2002 and 2012, males accounted for 77% of all drowning deaths in the 5–19 years age group compared to 63% of the drowning deaths in the 0-4 years age group ...

The predominance of males as drowning victims is even more evident in the late teen years (ages 15-19), as 87% of all drowning deaths in this age group involved males. This may be reflective of increased risk taking behaviour and exposure to drowning hazards in older boys that should be further explored.⁴⁶

The Office also found that the disparity between the sexes increased with age.

Of the 258 children who were admitted to a hospital following a non-fatal drowning incident, 156 were male children (60 per cent) and 102 were female children (40 per cent). More male children were admitted to a hospital following a non-fatal drowning incident than female children across all age groups, as shown in Figure 9.

Figure 9: Number of children who were admitted to a hospital, following a non-fatal drowning incident by age and sex



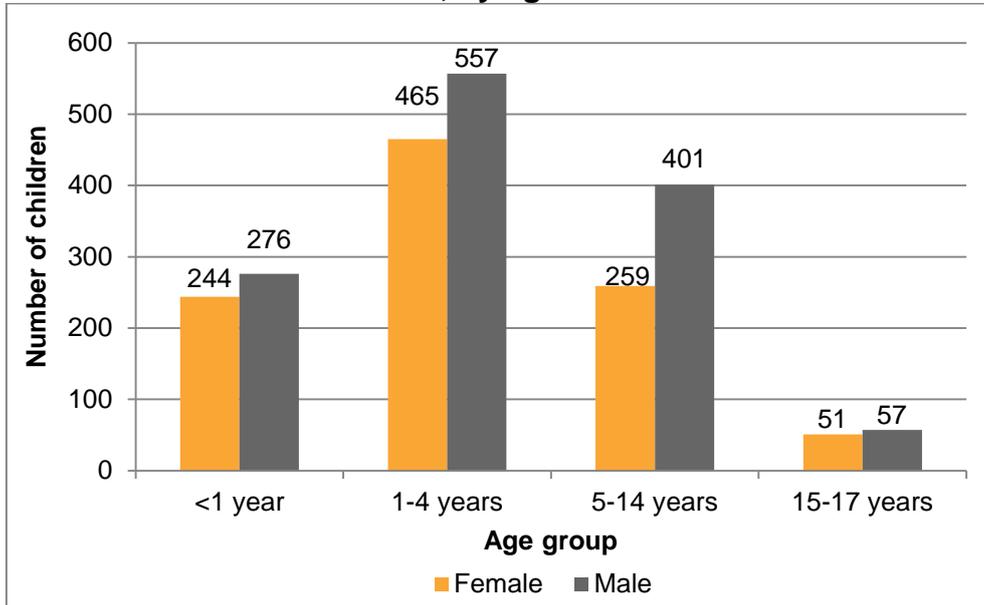
Source: Ombudsman Western Australia

Of the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident, 1,291 were male children (56 per cent) and 1,019 were female children (44 per cent). More male children attended an emergency department at a

⁴⁶ Queiroga, AC and Peden, A, (2013), *A 10 year analysis of drowning in children and adolescents aged 5-19 years in Australia: The forgotten 50%*. Royal Life Saving Society Australia, Australia, Sydney, p. 6.

hospital following a non-fatal drowning incident than female children across all age groups, as shown in Figure 10.

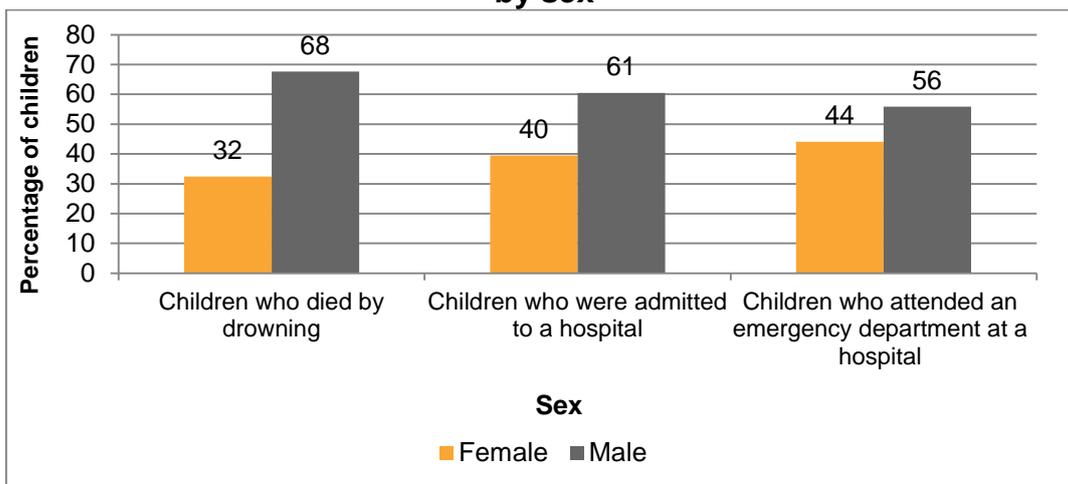
Figure 10: Number of children who attended an emergency department at a hospital following a non-fatal drowning incident, by age and sex



Source: Ombudsman Western Australia

Overall, the Office found that more male children than female children died by drowning, and more male children than female children were admitted to a hospital and attended an emergency department at a hospital following a non-fatal drowning incident (Figure 11).

Figure 11: Percentage of children who died by drowning, who were admitted to a hospital or who attended an emergency department at a hospital following a non-fatal drowning incident, by sex



Source: Ombudsman Western Australia

Note: Percentages do not add to 100 due to rounding.

3.2.3 Region of residence

Using regions defined by the ABS,⁴⁷ the Office analysed the postcodes of the usual residence of the 34 children who died by drowning and found that:

- twenty-four children (71 per cent) resided in a major city or an inner regional area;
- eight children (24 per cent) resided in an outer regional area;
- no children resided in a remote region; and
- two children (six per cent) resided in a very remote region.⁴⁸

The Office's findings are consistent with Royal Life Saving Society Australia's (RLSSA) report on all drowning deaths that occurred in 2014-2015, which identified that:

Sixty six percent of drowning deaths in 2014/15 took place in areas deemed to be Major Cities or Inner Regional.

...

Ten percent of all drowning deaths in 2014/15 occurred in areas deemed to be Remote or Very Remote.⁴⁹

The Office also analysed the postcodes of the usual residence of the 258⁵⁰ children who were admitted to a hospital and the 2,310⁵¹ children who attended an emergency department at a hospital following a non-fatal drowning incident. As shown in Figure 12, the Office found that the admission rates to a hospital of the children residing in very remote Western Australia were higher than the admission rates of those children residing elsewhere. In contrast, children residing in major cities of Western Australia had a higher rate of attendance at an emergency department at a hospital than children residing elsewhere. For comparative purposes, the Office's analysis also identifies the population of children in each region in 2011.⁵²

⁴⁷ For this purpose, the Office categorised the usual residence of the children into 'Remoteness Areas' as defined by the Australian Bureau of Statistics' Australian Statistical Geography Standard (ASGS). For more information see: Australian Bureau of Statistics, *Australian Statistical Geography Standard (ASGS): Volume 5 - Remoteness Structure*, cat. no. 1270.0.55.005, ABS, Canberra, July 2011.

⁴⁸ Note: Percentages do not add up to 100 due to rounding.

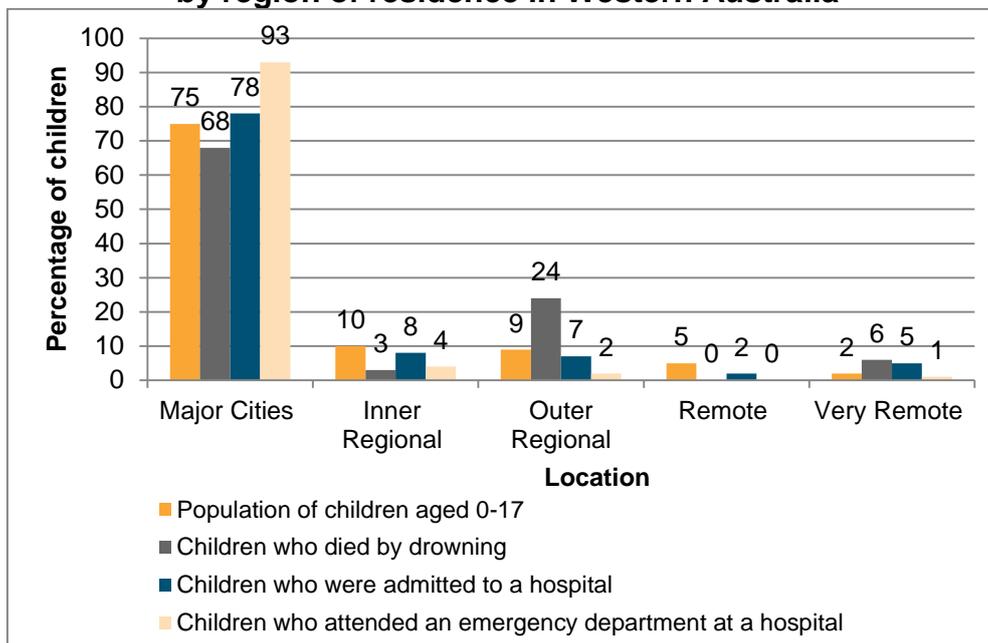
⁴⁹ Royal Life Saving Society Australia, *National Drowning Report 2015*, 2015, viewed 15 February 2016, http://www.royallifesaving.com.au/__data/assets/pdf_file/0006/14559/RLS_NDR2015_Report_LR.pdf, p. 28,

⁵⁰ The postcodes for the residences of 17 children who were admitted to hospital included two or more ABS regions; a single region of residence for these children was therefore unascertainable and accordingly these 17 children were excluded from this analysis.

⁵¹ The postcodes for the residences of 32 children who attended an emergency department included two or more ABS regions; a single region of residence for these children was therefore unascertainable and accordingly these 32 children were excluded from this analysis.

⁵² To determine the population of children aged 0 to 17 in each 'Remoteness Area' the Office generated a customised table using the Australian Bureau of Statistics data '2011 Census – Usual Address and Internal Migration', *Census of Population and Housing 2011*.

Figure 12: Percentage of children who died by drowning, who were admitted to a hospital, or who attended an emergency department at a hospital following a non-fatal drowning incident, by region of residence in Western Australia



Source: Ombudsman Western Australia

3.2.4 Country of birth

The Office found that, of the 34 children who died by drowning, 32 (94 per cent) were born in Australia and two (6 per cent) were born outside Australia. For comparison, in 2011, children and young people who were born outside Australia made up 14 per cent of the population aged under 18 years in Western Australia.⁵³

Information about country of birth was not available for the 258 children who were admitted to a hospital or the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident.

The Office collected additional data regarding the place of birth of the parents of the children who died by drowning. Of the 32 children who died by drowning and who were born in Australia, eight children (25 per cent) had a parent or parents who were born outside Australia (in New Zealand, China, England, Germany and Kenya). For comparison, in 2011, 20 per cent of the population of Australia had at least one parent born outside Australia.⁵⁴

Of these eight children:

- three children were born in Australia with both parents born outside Australia; and

⁵³ Australian Bureau of Statistics, *Migration, Australia, 2010-11, Estimated Resident Population: Customised Data Report*, Estimated Resident Population (ERP) 0-17 year olds and all ages, Western Australia, 30 June 2011, cat. no. 3412.0, ABS.

⁵⁴ Australian Bureau of Statistics, *Reflecting a Nation: Stories from the 2011 Census, 2012-2013*, cat. no. 2071.0, ABS, June 2012.

- five children were born in Australia with one parent born outside Australia. The research literature suggests that people born in some countries other than Australia are believed to be at a greater risk of drowning because:

Although the situation is improving, lifesaving systems are not as common in developing countries and even some high income countries, meaning that tourists and recently arrived migrants are at a greater risk of drowning due to lower levels of awareness and foundation aquatic skills.

...

This issue is worsened by an often heightened risk of drowning or injury due to a lack of knowledge about Australian aquatic conditions.⁵⁵

Bearing in mind the relatively low numbers of deaths, it is not yet possible to determine whether this is the case in Western Australia.

Of the 10 children who died by drowning and who were either born outside Australia or had a parent born outside Australia:

- six children were aged between zero and four years; and
- four children were aged between five and 14 years.

3.2.5 Aboriginal and Torres Strait Islander children

The Office found that five (15 per cent) of the 34 children who died by drowning were recorded as being Aboriginal and no children were recorded as being Torres Strait Islander.⁵⁶

For comparison, in 2011 Aboriginal and Torres Strait Islander children made up six per cent of children aged between zero and 17 years in Western Australia.⁵⁷

Of the five Aboriginal children who died by drowning:

- two Aboriginal children (40 per cent) drowned in a private swimming pool; and
- three Aboriginal children (60 per cent) drowned in a river or dam.

The Office's findings are consistent with the research literature, which suggests that the risk of drowning for Aboriginal children:

... is three times higher than other Australian children aged 0–14 years and is ranked the second most common cause of injury death. A review of drowning

⁵⁵ Australian Water Safety Council, *Australian Water Safety Strategy 2012-15*, Sydney, 2012, p. 34, citing the Australian Water Safety Council, *Australian National Water Safety Plan 2004-07*, Sydney, 2004.

⁵⁶ The Department of Health provided the Office with information about Aboriginal origin of the 34 children who died by drowning. In this respect, the Department of Health records 'Aboriginal not Torres Strait Islander origin,' 'Torres Strait Islander not Aboriginal origin,' 'Not-Aboriginal or Torres Strait Islander origin', 'Other' and 'Unknown'.

⁵⁷ Developed using the Australian Bureau of Statistics, '2011 Census Counts – Aboriginal and Torres Strait Islander Peoples', *Census of Population and Housing – Counts of Aboriginal and Torres Strait Islander Australians, 2011*, cat. no. 2075.0, ABS, Canberra, June 2012.

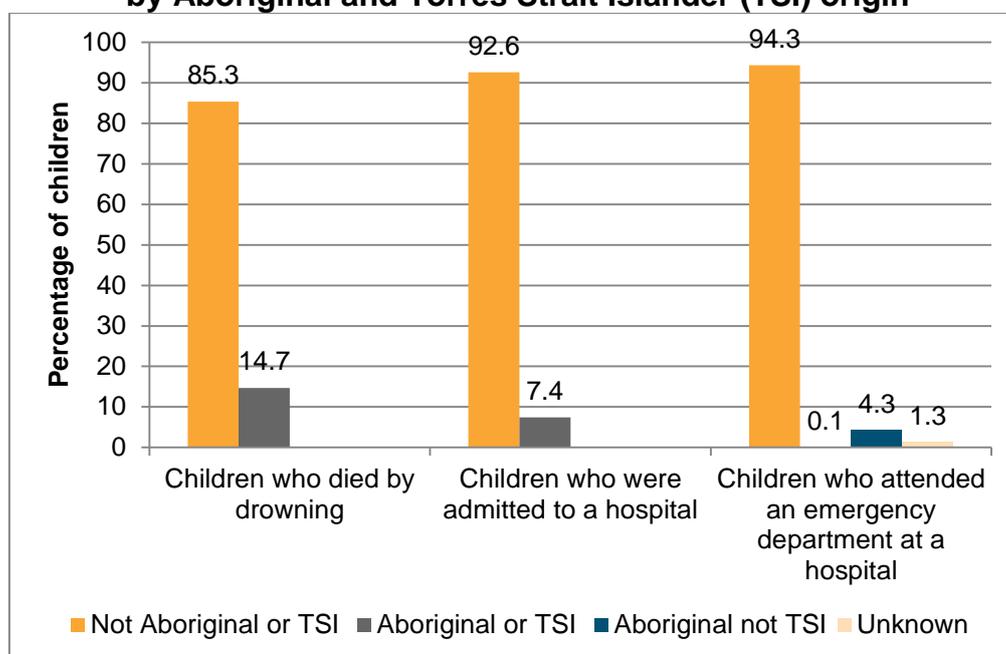
data indicates limited water safety awareness combined with alarmingly low participation levels in swimming and water safety programs as key factors.⁵⁸

Of the 258 children who were admitted to a hospital, 19 children (7.4 per cent) were recorded as being Aboriginal and/or Torres Strait Islander (Figure 13).⁵⁹

Of the 2,310 children who attended an emergency department at a hospital, 102 children (4.4 per cent) were recorded as being Aboriginal and/or Torres Strait Islander (Figure 13).⁶⁰

Bearing in mind the relatively low numbers of deaths, Aboriginal children were twice as likely to die by drowning as non-Aboriginal children. Aboriginal children were as likely as non-Aboriginal children to be admitted to a hospital and less likely to attend an emergency department following a non-fatal drowning incident.

Figure 13: Percentage of children who died by drowning, who were admitted to a hospital or who attended an emergency department at a hospital, following a non-fatal drowning incident, by Aboriginal and Torres Strait Islander (TSI) origin



Source: Ombudsman Western Australia

⁵⁸ Royal Life Saving Society Western Australia, *Swim and survive: Indigenous participation*, viewed 22 July 2015, <<https://www.lifesavingwa.com.au/programs/swim-and-survive/accessandequity/participation/indigenous-participation>>.

⁵⁹ The Department of Health provided the Office with information about Aboriginal origin of the 258 children who were admitted to a hospital following a non-fatal drowning incident. In this respect, the Department of Health records 'Aboriginal or Torres Strait Islander origin,' and 'Not Aboriginal or Torres Strait Islander origin'.

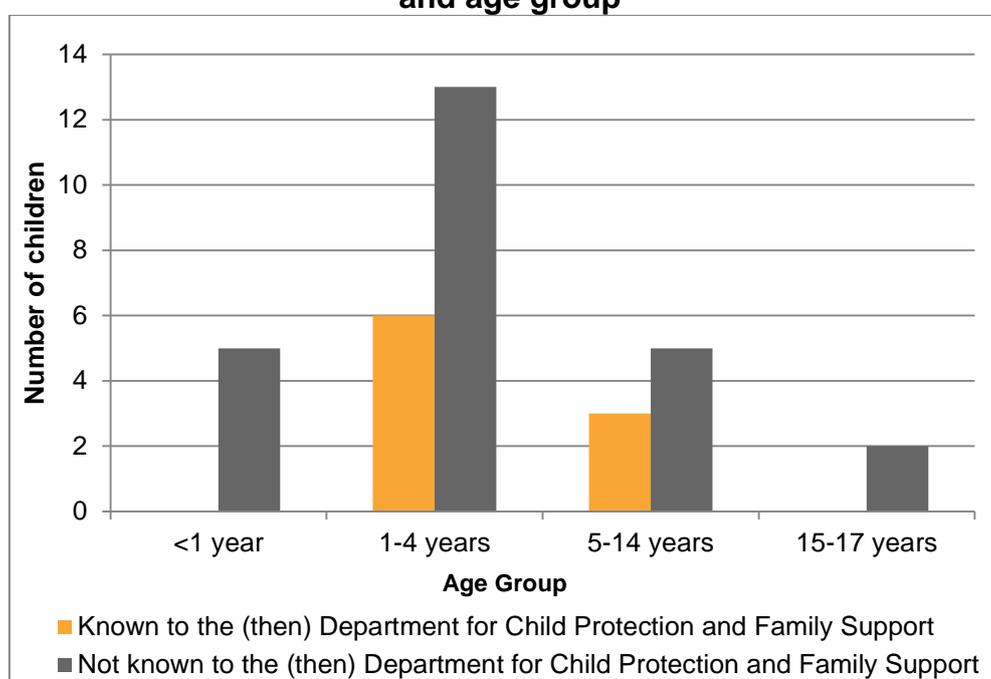
⁶⁰ The Department of Health provided the Office with information about Aboriginal origin of the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident. In this respect, the Department of Health records 'Aboriginal not Torres Strait Islander origin,' 'Aboriginal or Torres Strait Islander origin,' 'Not Aboriginal or Torres Strait Islander origin' and 'Unknown'.

3.2.6 Children known to the (then) Department for Child Protection and Family Support

The Office found that nine (26 per cent) of the 34 children who died by drowning were known to the (then) Department for Child Protection and Family Support (DCPFS) (Figure 14). Reasons for the family to be known to DCPFS included:

- financial assistance;
- assistance with postnatal depression;
- family support;
- Best Beginnings program; and
- neglect and wellbeing concerns including family and domestic violence concerns.

Figure 14: Number of children who died by drowning, by whether they were known to the (then) Department for Child Protection and Family Support and age group



Source: Ombudsman Western Australia

3.2.7 Socioeconomic status

The Office analysed the postcodes of the usual residence of the 34 children who died by drowning, the 258 children who were admitted to a hospital and the 2,310 children who attended an emergency department at a hospital⁶¹ following a non-fatal drowning incident using the (state-based) Index of Relative Socio-economic Advantage and Disadvantage (IRSAD).

⁶¹ Data was available for all of the 34 children who died by drowning. Of the 258 children who were admitted to a hospital: one child resided outside of Western Australia; and for one child, the suburb was not recorded. Of the 2,310 who attended an emergency department at a hospital: for 18 children, suburbs were not recorded; 10 children resided in suburbs that were not indexed; and 10 children resided outside of Western Australia.

The ABS describes the IRSAD as follows:

The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) summarises information about the economic and social conditions of people and households within an area, including both relative advantage and disadvantage measures.⁶²



Based on its IRSAD score, the ABS assigns a 'decile' for each postcode area as follows:

... all areas are ordered from lowest to highest score, then the lowest 10% of areas are given a decile number of 1, the next lowest 10% of areas are given a decile number of 2 and so on, up to the highest 10% of areas which are given a decile number of 10. This means that areas are divided up into ten equal sized groups, depending on their score.⁶³

The ABS further advises that '[a]s measures of socio-economic conditions, the indexes are best interpreted as ordinal measures that rank (order) areas ... we generally recommend using the index rankings and quantiles (e.g. deciles) for analysis, rather than using the index scores'.⁶⁴

The Office also analysed ABS data regarding the usual resident population in each decile and identified that of Western Australia's usual resident population:

- 1.41 per cent resided in decile 1;
- 3.71 per cent resided in decile 2;
- 5.77 per cent resided in decile 3;
- 7.08 per cent resided in decile 4;
- 15.83 per cent resided in decile 5;
- 9.30 per cent resided in decile 6;
- 12.50 per cent resided in decile 7;
- 10.61 per cent resided in decile 8;
- 14.82 per cent resided in decile 9; and
- 18.96 per cent resided in decile 10.⁶⁵

⁶² Australian Bureau of Statistics, *Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011*, IRSAD, ABS, Canberra, at March 2013, cat. No. 2033.0.55.001 - viewed 21 June 2016, <<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2033.0.55.001main+features100042011>>.

⁶³ Australian Bureau of Statistics, *Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011*, IRSAD, ABS, Canberra, at March 2013, cat. No. 2033.0.55.001 - viewed 21 June 2016, <<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2033.0.55.001main+features100042011>>.

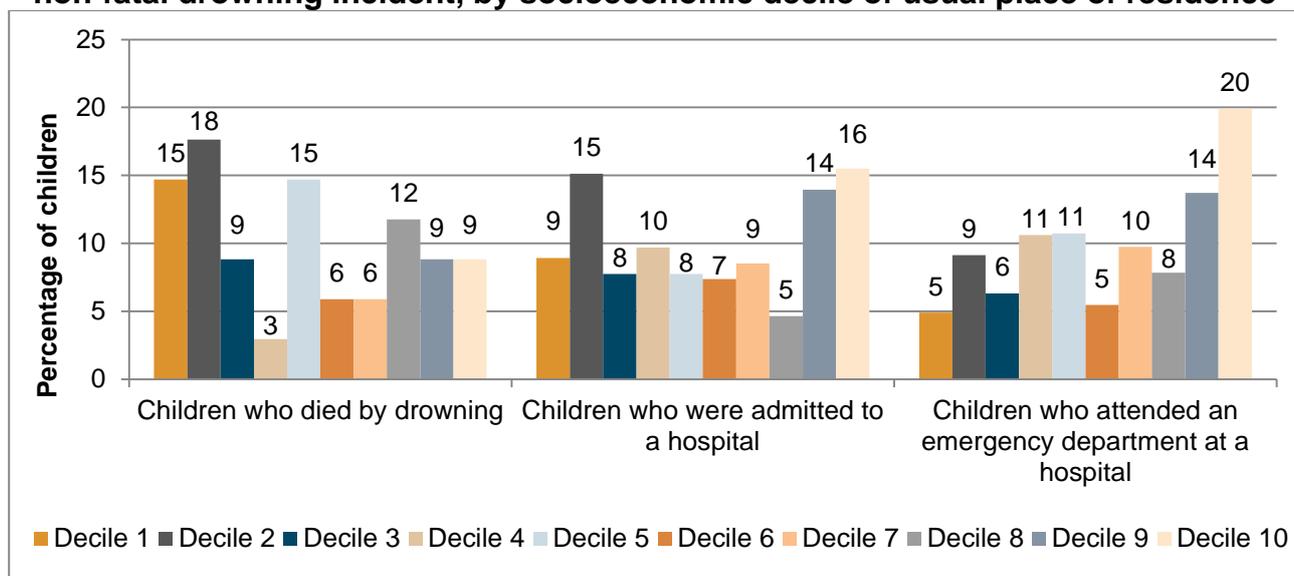
⁶⁴ Australian Bureau of Statistics, *Technical Paper: Socio-Economic Indexes for Areas (SEIFA 2011)*, ABS, Canberra, March 2013, p. 5.

⁶⁵ Ombudsman Western Australia analysis based on Australian Bureau of Statistics, *Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011*, IRSAD, ABS, Canberra, at March 2013, cat. No. 2033.0.55.001 - viewed 21 June 2016, <<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2033.0.55.001main+features100042011>>.

The Office found that:

- While 1.41 per cent of the Western Australian population resided in decile 1 suburbs at the time of the 2011 Census, 15 per cent of children who died by drowning resided in decile 1 suburbs (relatively socioeconomically disadvantaged suburbs). That is, children who died by drowning and resided in decile 1 suburbs were overrepresented by a factor of 10.7. In contrast, while 18.96 per cent of the Western Australian population resided in decile 10 suburbs, 9 per cent of children who died by drowning resided in decile 10 suburbs (relatively socioeconomically advantaged suburbs). That is, children who died by drowning and resided in decile 10 suburbs were underrepresented by a factor of 0.5;
- While 1.41 per cent of the Western Australian population resided in decile 1 suburbs at the time of the 2011 Census, 9 per cent of children who were admitted to a hospital following a non-fatal drowning incident resided in decile 1 suburbs (relatively socioeconomically disadvantaged suburbs). That is, children who were admitted to a hospital following a non-fatal drowning incident and resided in decile 1 suburbs were overrepresented by a factor of 6.4. In contrast, while 18.96 per cent of the Western Australian population resided in decile 10 suburbs, 16 per cent of children who were admitted to a hospital following a non-fatal drowning incident resided in decile 10 suburbs (relatively socioeconomically advantaged suburbs). That is, children who were admitted to a hospital following a non-fatal drowning incident and resided in decile 10 suburbs were underrepresented by a factor of 0.8; and
- While 1.41 per cent of the Western Australian population resided in decile 1 suburbs at the time of the 2011 Census, 5 per cent of children who attended an emergency department at a hospital following a non-fatal drowning incident resided in decile 1 suburbs (relatively socioeconomically disadvantaged suburbs). That is, children who attended an emergency department at a hospital following a non-fatal drowning incident and resided in decile 1 suburbs were overrepresented by a factor of 3.6. In contrast, while 18.96 per cent of the Western Australian population resided in decile 10 suburbs, 20 per cent of children who attended an emergency department at a hospital following a non-fatal drowning incident resided in decile 10 suburbs (relatively socioeconomically advantaged suburbs). That is, children who attended an emergency department at a hospital following a non-fatal drowning incident and resided in decile 10 suburbs were approximately representative of the population (with a factor of 1.1) (Figure 15).

Figure 15: Percentage of children who died by drowning, who were admitted to a hospital, or who attended an emergency department at a hospital, following a non-fatal drowning incident, by socioeconomic decile of usual place of residence



Source: Ombudsman Western Australia

Note: Percentages do not add to 100 due to rounding.

These findings are consistent with the research literature, which suggests that socioeconomic status is a risk factor for drownings.⁶⁶ For example, Kidsafe WA observes that socioeconomic status is a risk factor in all causes of child injury and death, as follows:

The lower the socioeconomic status the higher the risk of injury and death due to injury. Education, income and employment influence the opportunities for knowledge about safety, access to care services, quality housing facilities and furniture, along with safety products. Children from poorer families are generally disposed to be more affected by injuries.⁶⁷

3.3 Circumstances of fatal and non-fatal drowning incidents during the six-year investigation period

3.3.1 Definition of swimming pool

The *National Construction Code 2016: Building Code of Australia* Volume One Part A1 (the **Building Code of Australia**) defines a swimming pool as follows:

Swimming pool means any excavation or structure containing water and principally used, or that is designed, manufactured or adapted to be principally used for swimming, wading, paddling, or the like, including a bathing or wading pool, or spa.⁶⁸

⁶⁶ Royal Life Saving Society Australia, *National Drowning Report 2015*, 2015, viewed 15 February 2016, <http://www.royallifesaving.com.au/__data/assets/pdf_file/0006/14559/RLS_NDR2015_Report_LR.pdf>, p. 26.

⁶⁷ Richards, J and Leeds, M, *Child Injury Overview*, Kidsafe Western Australia, Child Accident Prevention Foundation of Australia, Perth, 2012, p. 6, citing Ballestas, T, Xiao, J, McEvoy, S & Somerford, P, *The Epidemiology of Injury in Western Australia, 2000-2008*, Department of Health WA, Perth, 2011.

⁶⁸ Australian Building Codes Board, *National Construction Code 2016: Volume One Building Code of Australia Class 2 to Class 9 Buildings*, February 2016, p. 32.

Regulation 3 of the *Building Regulations 2012* further defines a private swimming pool as follows:

private swimming pool means a swimming pool —

- (a) that is associated with —
 - (i) a Class 1a building; or
 - (ii) less than 30 sole-occupancy units in a Class 2 building; or
 - (iii) a Class 4 part of a building;
- and
- (b) which has the capacity to contain water that is more than 300 mm deep;
- ...

The Building Code of Australia defines the classes of buildings referred to in regulation 3 of the *Building Regulations 2012* as follows:

Class 1: One or more buildings which in association constitute-

Class 1a – a single dwelling being-

- (i) a detached house; or
- (ii) one of a group of two or more attached dwellings, each being a building, separated by a fire-resisting wall, including a row house, terrace house, town house or villa unit; or

...

Class 2: A building containing 2 or more sole-occupancy units each being a separate dwelling.

...

Class 4: A dwelling in a building that is Class 5 [an office building], 6 [a shop or other building for the sale of goods by retail or the supply of services direct to the public], 7 [a car park or for storage or display of goods or produce for sale by wholesale], 8 [a laboratory or a building involved in the production, repair or cleaning of goods], or 9 [public building] if it is the only dwelling in the building.⁶⁹

In this report, the term **private swimming pool** is used to refer to both a private swimming pool and a private spa. Where it is not known whether the swimming pool or spa is a private swimming pool or spa, or is not a private swimming pool or spa, or this distinction is not relevant, the term **swimming pool** is used.

3.3.2 Location of drowning incidents

The Office found that, for 16 (47 per cent) of the 34 children who died by drowning, the fatal drowning incident occurred in a private swimming pool (Figure 16).

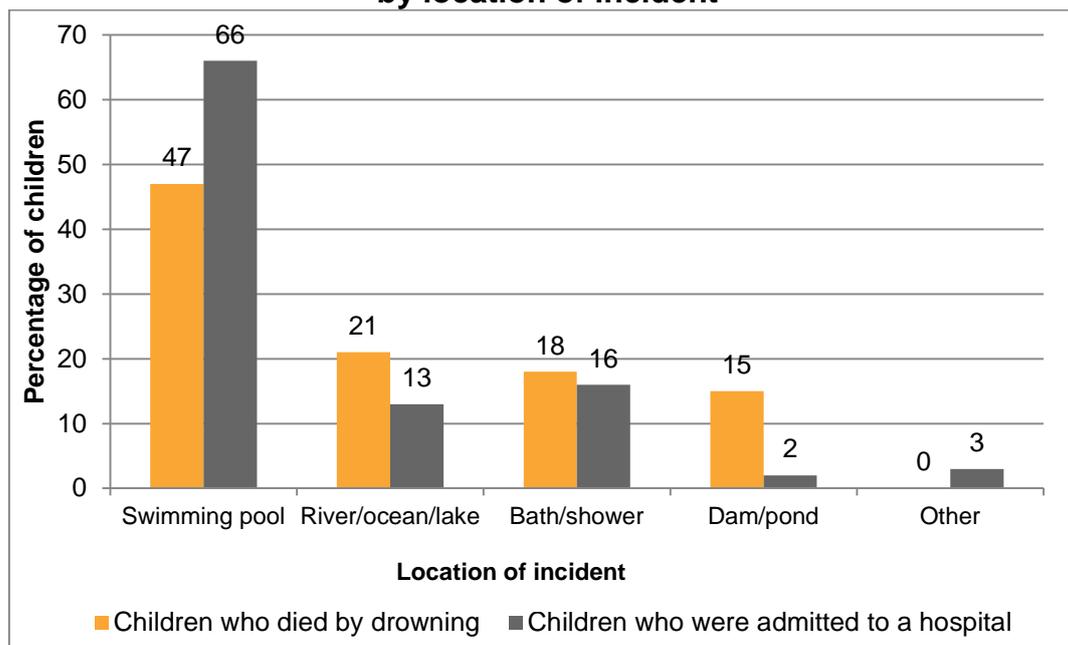
For 170 (66 per cent) of the 258 children who were admitted to a hospital following a non-fatal drowning incident, the incident occurred in a swimming pool. On the basis of the

⁶⁹ Australian Building Codes Board, *National Construction Code 2016: Volume One Building Code of Australia Class 2 to Class 9 Buildings*, February 2016, p. 37.

information collected by the Office,⁷⁰ it is estimated that 72 per cent of these incidents occurred in private swimming pools and 17 per cent occurred in swimming pools that were not private swimming pools. For 11 per cent of incidents, the location of the incident was not able to be classified from the information collected.

Data regarding the location of the incident was not available for the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident.

Figure 16: Percentage of children who died by drowning or who were admitted to a hospital following a non-fatal drowning incident, by location of incident



Source: Ombudsman Western Australia

Note: Percentages do not add to 100 due to rounding.

The Office also found that, of the 34 children who died by drowning, 12 children died by drowning following an incident in a river, ocean, lake, dam or pond. The Office found that, of these 12 children, five children (42 per cent) died by drowning following an incident in a dam or river located in an outer regional or very remote region. Of these five children:

- three (60 per cent) children died by drowning following an incident in a dam; and
- two (40 per cent) children died by drowning following an incident in a river.

The Office's findings are consistent with the research literature, which highlights that dams and other water bodies on farms present a drowning risk, as follows:

An average of 5 to 6 children drown in farm dams and water bodies each year in Australia. Most are under five years of age and a third are visitors to the farm. The most common situation is that a toddler wanders away from supervision un-

⁷⁰ The Office reviewed the child's records relating to their admission to a hospital, including, for example, the location from which the child was conveyed via ambulance. This information did not routinely record whether the swimming pool was public or private, however, using the available information, the Office was able to categorise the majority of swimming pools as public or private (for example, if the location was recorded as 'backyard swimming pool' this was categorised as a private swimming pool).

noticed, finding their way into a farm dam. They may be noticed missing only after a few minutes. A securely fenced house yard, supported by active supervision, is one of the best ways to help prevent a toddler drowning ...⁷¹

In summary, the Office found that, for 16 (47 per cent) of the 34 children who died by drowning and 170 (66 per cent) of the 258 children who were admitted to a hospital following a non-fatal drowning incident, the incident occurred in a swimming pool.

Further investigation of drownings in dams and river systems

The Office will undertake a separate investigation of the deaths of children who drowned in a dam or river. This investigation will build upon all of the relevant findings and recommendations in this report to determine whether it is appropriate for the Ombudsman to make recommendations about ways to prevent or reduce child deaths that are specific to drownings in dams and river systems, particularly in regional and remote Western Australia, including deaths of Aboriginal children.

3.3.2.1 Location of drowning incident by age

The Office found that, of the five children aged less than one year who died by drowning:

- four children died by drowning following an incident in a bath or shower; and
- one child died by drowning following an incident in a private swimming pool (Figure 17).

Of the 19 children aged one to four years who died by drowning:

- twelve children died by drowning following an incident in a private swimming pool;
- four children died by drowning following an incident in a dam or pond;
- two children died by drowning following an incident in a river, ocean or lake; and
- one child died by drowning following an incident in a bath or shower (Figure 17).

Considering these two age groups together, the Office's analysis shows that private swimming pools were the location of over half of the fatal drowning incidents. Of the 24 children aged under five years who died by drowning, 13 (54 per cent) died following an incident in a private swimming pool.

Of the 10 children aged five to 17 years who died by drowning:

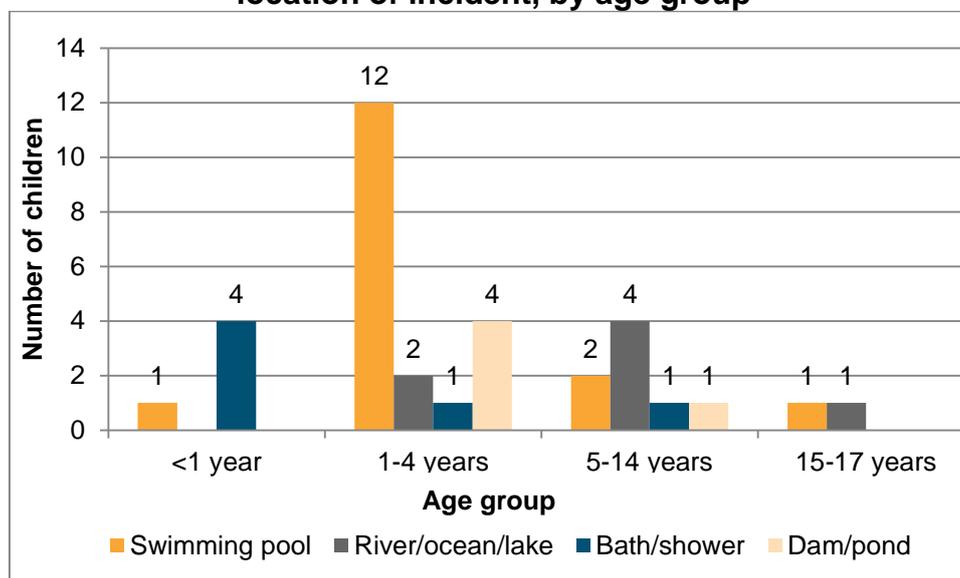
- six children died by drowning following an incident in a river, ocean, lake, dam, or pond;
- three children died by drowning following an incident in a private swimming pool; and
- one child died by drowning following an incident in a bath or shower (Figure 17).

These findings are consistent with the research literature, which has found that, in Western Australia, for children aged between zero and 14 years, '63% of drowning deaths occurred at home pools'.⁷²

⁷¹ Australian Centre for Agricultural Health and Safety, *Safe Play Areas on Farms*, viewed 12 April 2016, <<http://www.farmsafe.org.au/Safe-Play-Areas>>.

In summary, the Office found that for children under one who died by drowning, the incident more frequently occurred in a bath or shower, for children aged from one to four years the incident more frequently occurred in a private swimming pool and for children aged from five to 17 years the incident more frequently occurred in a river, ocean, lake dam or pond.

Figure 17: Number of children who died by drowning, location of incident, by age group



Source: Ombudsman Western Australia

The Office's findings are also consistent with further research literature, which suggests that the location of drowning deaths is age-dependent.

Research conducted by Royal Life Saving shows that between 1 July 2002 and 30 June 2011 there were 318 drowning deaths in children aged 0-4 years in Australia. Children under the age of five most commonly (51%) drown in home swimming pools.⁷³

RLSSA also analysed activities prior to the drowning incident and found that as children aged, the locations of drowning deaths and associated activity transitioned from home environments (private swimming pools and bathtubs) to open waterways (rivers, creeks and streams), as follows:

An analysis of drowning deaths by activity immediately prior to drowning shows that the number of falls into water declines from 49% for 0 - 19 years old to 18% in the 5 - 19 age group. When looking at each main age group separately, a clear shift in activities immediately prior to drowning is observable. Falls and bathing are the main activities for children under 5, accounting for 77% and 14% of all drowning deaths, respectively. Swimming and recreating, falls and watercrafts were, in contrast, the main activities for children and adolescents aged 5 to 19 years old, accounting for 36%, 18% and 11%, respectively. Younger children of

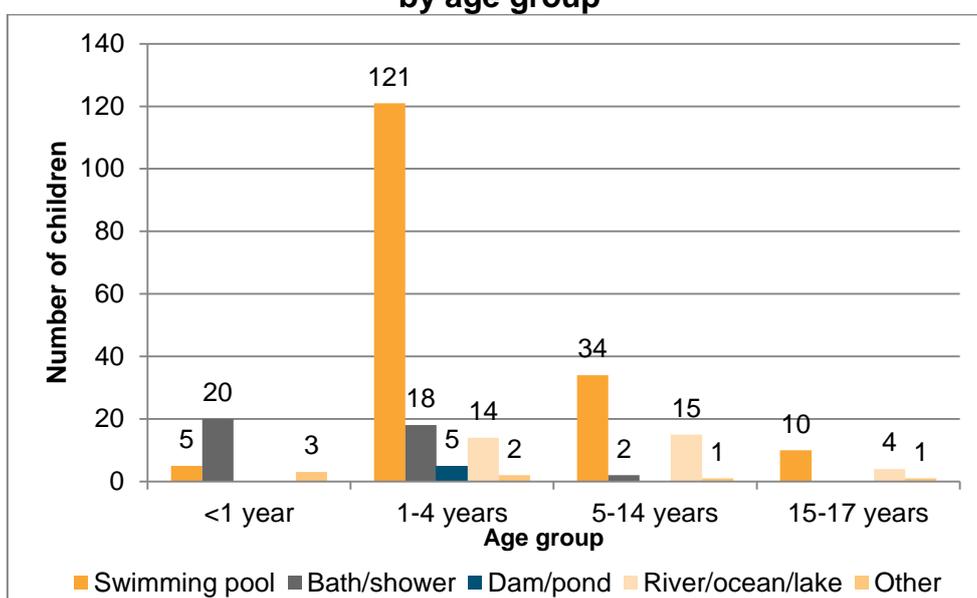
⁷² Royal Life Saving Western Australia, *Drowning and Near-Drowning Report 2012*, 2013, viewed 12 April 2017, <https://lifesavingwa.com.au/~media/files/rlsswa/research-and-reports/drowning-reports/drowning-report_2012>, p. 3.

⁷³ The Australian Water Safety Council, *The Australian Water Safe Strategy 2012-15*, Sydney, 2012, viewed 19 January 2015, <http://watersafety.com.au/Portals/0/AWSC%20Strategy%202012-15/AWSC_Strategy2012_Brochure%20-%20Lowres.pdf>, p. 14.

the latter age group (i.e., aged 5 to 9) were still mostly falling into the water prior to drowning (36%) and 25% of children aged 5 to 9 years drowned after swimming and recreating. In later childhood and adolescence (age group 10 - 19) swimming and recreating was the main activity immediately prior to drowning, accounting for 40% of all drowning deaths in that age group.⁷⁴

The Office found that, of the 258 children who were admitted to a hospital following a non-fatal drowning incident, the majority of the children aged less than one year were admitted following an incident in a bath or shower. However, the majority of children across all other age groups were admitted following an incident in a swimming pool, as shown in Figure 18.

Figure 18: Number of children who were admitted to a hospital following a non-fatal drowning incident, location of incident by age group



Source: Ombudsman Western Australia

For the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident, information regarding the location of the incident was not available.

3.3.2.2 Location of drowning incident for children who either were born outside Australia or whose parent/s were born outside Australia

The Office found that, of the 10 children who died by drowning who were either born outside Australia or whose parent/s were born outside Australia, five children died following an incident in a private swimming pool. In addition, of the 10 children who died by drowning who were either born outside Australia or whose parent or parents were born outside Australia, records indicated that two children's parents had limited English language skills so were unable to ask for assistance to search for the child who had gone missing around water.

⁷⁴ Queiroga, A and Peden, A, *A 10 year analysis of drowning in children and adolescents aged 5-19 years in Australia: The forgotten 50%*, Royal Life Saving Society Australia, Sydney, 2013, p. 12.

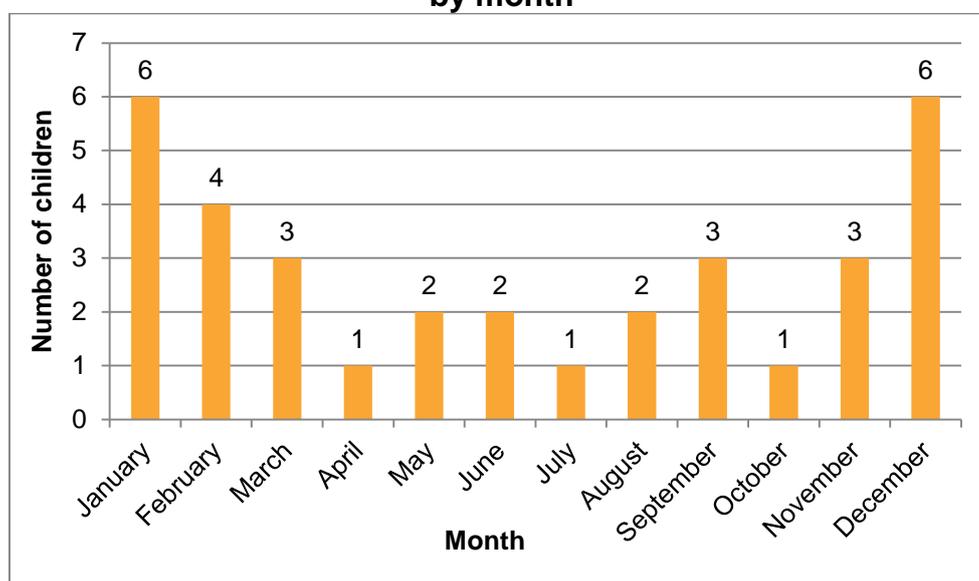
3.3.3 Month of drowning incidents

The Office found that the majority of the deaths of the 34 children who died by drowning occurred in the warmer months (three children in November, six children in December, six children in January and four children in February), as shown in Figure 19.

The Office's findings are broadly consistent with the research literature, which suggests that drowning is seasonal in Australia. On this point, the *RLSSA National Drowning Report 2016* observed that:

The highest number of drowning deaths occurred in summer (101 deaths), followed by spring (63 deaths), winter (59 deaths) and autumn (57 deaths) ... January was the month with the highest number of drowning deaths (40) ... ⁷⁵

Figure 19: Number of children who died by drowning, by month

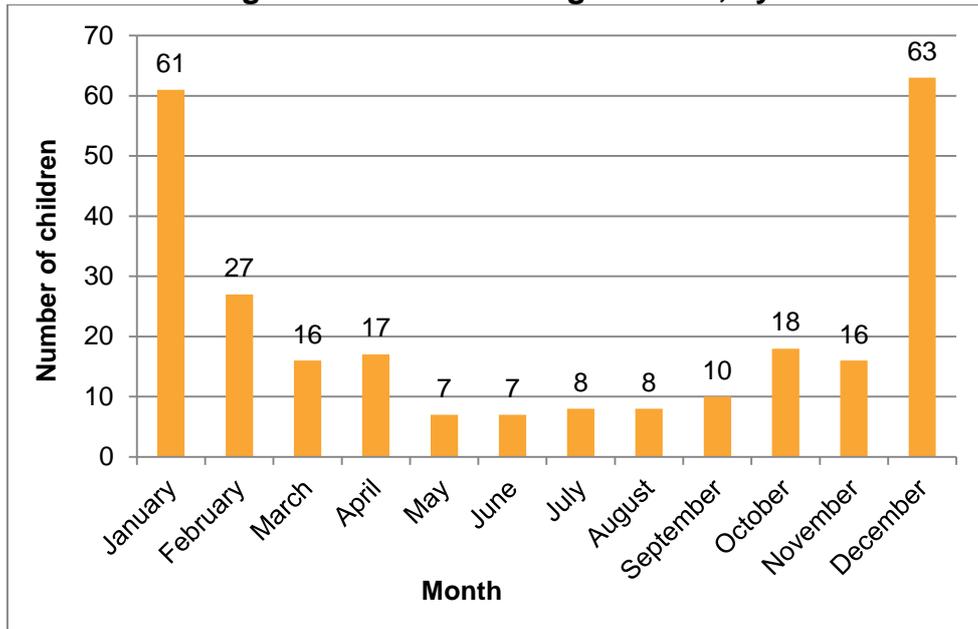


Source: Ombudsman Western Australia

Admissions to hospital and attendance at an emergency department at a hospital by children following a non-fatal drowning incident were also more frequent in the summer months, as shown in Figure 20 and Figure 21. For those children who were admitted to a hospital and those children who attended an emergency department at a hospital following a non-fatal drowning incident, December and January were the most common months for admissions and attendances.

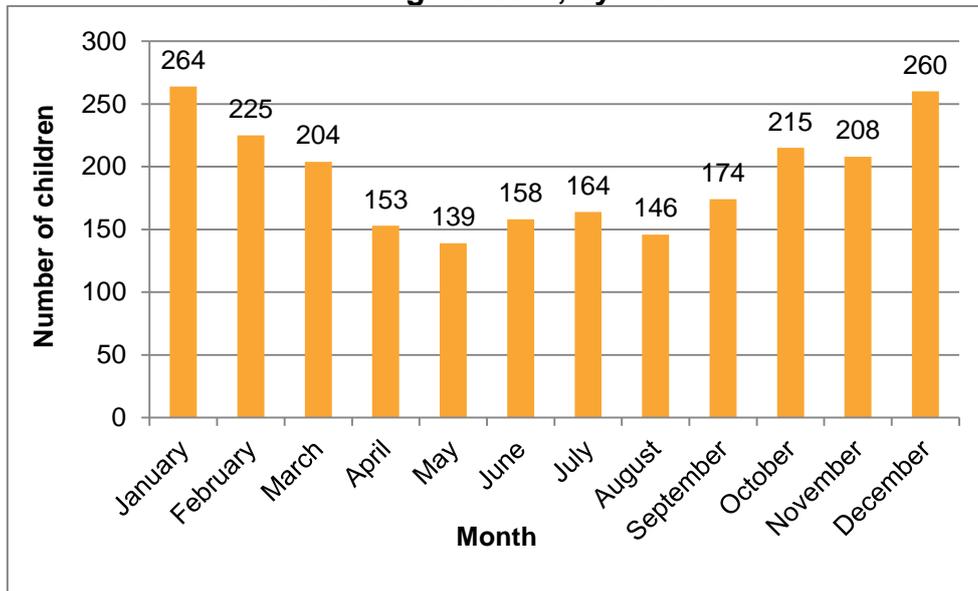
⁷⁵ Royal Life Saving Society Australia, *National Drowning Report 2016*, 2015, viewed 21 February 2017, <http://www.royallifesaving.com.au/__data/assets/pdf_file/0004/18085/RLS_NDR2016_ReportLR.pdf>, p. 9.

Figure 20: Number of children who were admitted to a hospital following a non-fatal drowning incident, by month



Source: Ombudsman Western Australia

Figure 21: Number of children who attended an emergency department at a hospital following a non-fatal drowning incident, by month

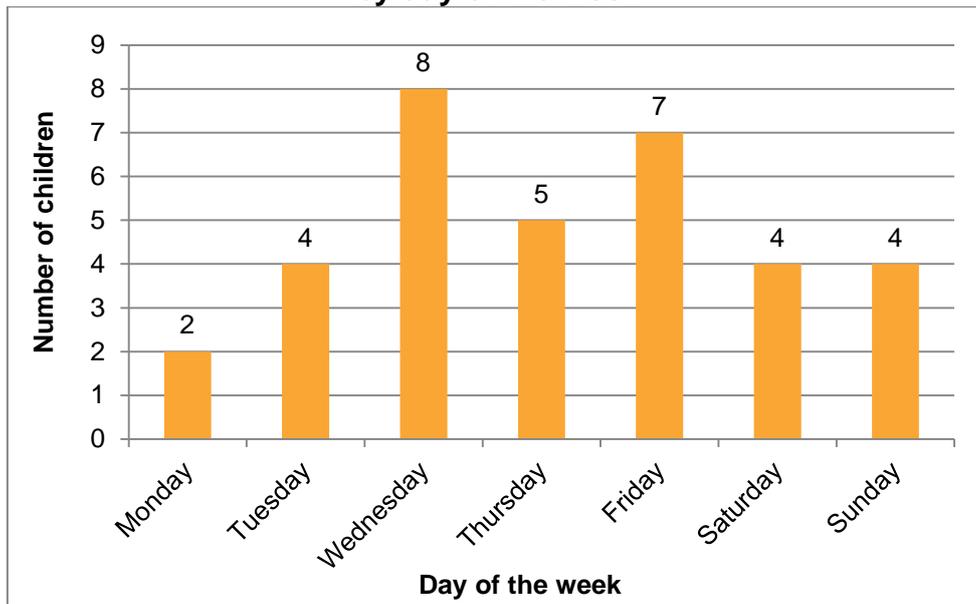


Source: Ombudsman Western Australia

3.3.4 Day of the week of drowning incidents

Bearing in mind the relatively low numbers of deaths, the Office found that the most common day of the week on which the deaths of the 34 children who died by drowning occurred was Wednesday (8 children, or 24 per cent), followed by Friday (7 children, or 21 per cent), as shown in Figure 22.

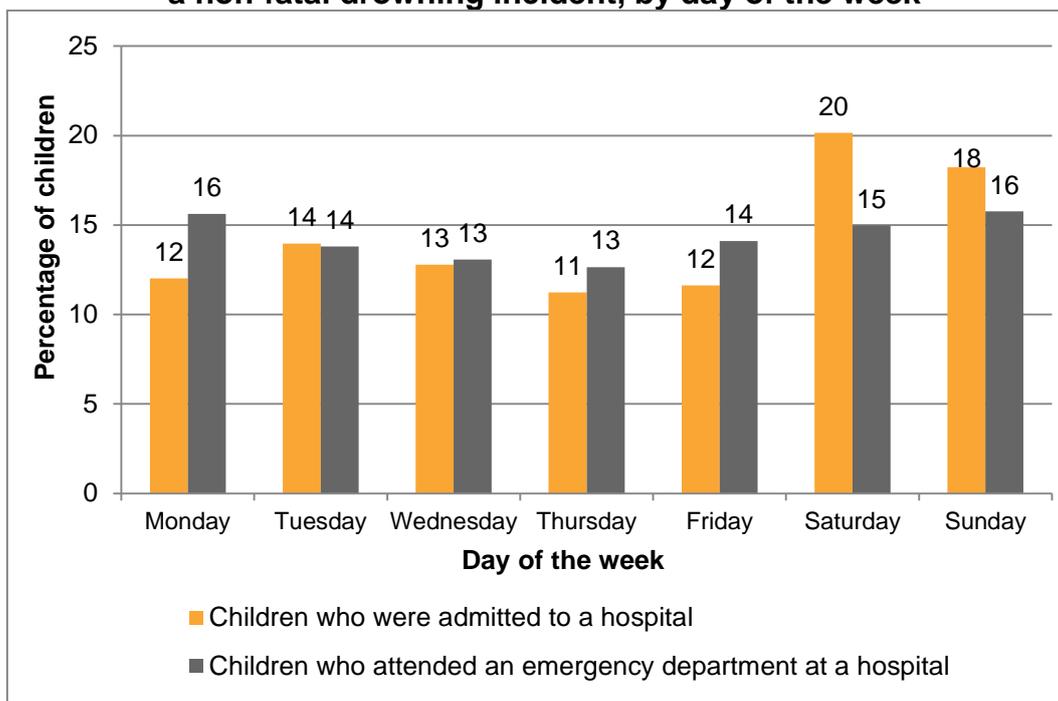
Figure 22: Number of children who died by drowning, by day of the week



Source: Ombudsman Western Australia

For the 258 children who were admitted to a hospital following a non-fatal drowning incident, the most common days for admissions were Saturday (52 children, or 20 per cent) and Sunday (47 children, or 18 per cent), as shown in Figure 23. For the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident, the most common days for attendances were Sunday (364 children, or 16 per cent) and Monday (361 children, or 16 per cent), as also shown in Figure 23.

Figure 23: Percentage of children who were admitted to a hospital or who attended an emergency department at a hospital following a non-fatal drowning incident, by day of the week



Source: Ombudsman Western Australia

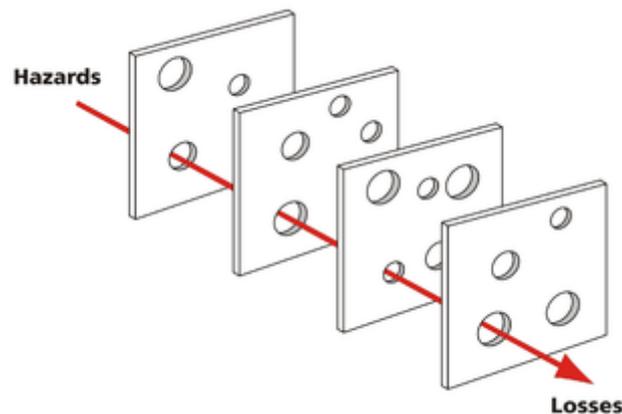
Note: percentages do not add to 100 per cent due to rounding.

4 Preventing and reducing deaths of children by drowning

In the research literature, the widely-used ‘swiss cheese model of accident causation’ is used for risk analysis and risk reduction. In this model, multiple slices of swiss cheese, stacked side by side, are analogous to different types of preventative factors layered behind one another so that lapses and weaknesses in one preventative factor compensate for lapses and weaknesses in other preventative factors, to prevent a single point of weakness.⁷⁶ As shown in Figure 24, this model suggests that:

In an ideal world each defensive layer would be intact. In reality, however, they are more like slices of Swiss cheese, having many holes – though unlike in the cheese, these holes are continually opening, shutting, and shifting their location. The presence of holes in any one “slice” does not normally cause a bad outcome. Usually, this can happen only when the holes in many layers momentarily line up to permit a trajectory of accident opportunity – bringing hazards into damaging contact with victims...⁷⁷

Figure 24: The swiss cheese model of accident causation



Source: J Reason⁷⁸

The ‘Haddon matrix of injury prevention’,⁷⁹ a widely-used injury prevention model, is based on the swiss cheese model of accident causation, and provides a framework for understanding the prevention of drowning and non-fatal drowning incidents, comprising environmental factors, individual factors and agent of injury factors, as follows:

In the Haddon matrix of injury prevention, safety interventions are aimed at changing the environment, the individual at risk, or the agent of injury (in this case, water). For drowning prevention, the environment and the individual are the prime targets. Experts generally recommend that multiple “layers of protection” be used to prevent drowning, because no single strategy is likely to prevent all submersion deaths and injuries. Such layers might include environmental changes such as adult supervision, pool fencing, pool covers, water-entry alarms,

⁷⁶ Reason, J, ‘Human error: models and management’, *British Medical Journal*, 2000, 320, pp. 768–70.

⁷⁷ Reason, J, ‘Human error: models and management’, *British Medical Journal*, 2000, 320, pp. 769.

⁷⁸ Reason, J, ‘Human error: models and management’, *British Medical Journal*, 2000, 320, pp. 768–70.

⁷⁹ Haddon, W, ‘Options for the prevention of motor vehicle crash injury’, *Israeli Medical Journal*, 1980, 16, pp. 45-65.

lifeguards, and CPR [Cardiopulmonary resuscitation] training. Additional prevention layers focused on the individual would include strategies such as swimming and survival skills training and use of PFDs [Personal Flotation Devices].⁸⁰

Common preventative factors for drowning identified in the research literature are:

- supervision;
- private swimming pool barriers;
- swimming skills; and
- cardiopulmonary resuscitation.

These factors are analysed in turn in detail below.

4.1 Supervision

4.1.1 Research literature

In the research literature, child deaths by drowning have been associated with a lack of, or lapse in, supervision.⁸¹ The research literature further suggests that children aged under five years of age who are known to be 'in, on, or around the water' (such as a bath, shower or swimming pool) require 'active adult supervision', as in the following:

Active adult supervision is essential in protecting your child from drowning. In all cases of drowning in children under five, supervision was either intermittent or lacking altogether. Active supervision means that a child is being constantly watched by an adult who is within arms' reach at all times. All of your attention should be on the child and you should never leave a child alone, or in the care of an older child, when they are in, on, or around the water.⁸²

Active adult supervision is important as '[d]rowning usually occurs silently and rapidly.'⁸³

Even when a child under five is not known to be in, on, or around water, the Queensland Family and Child Commission⁸⁴ (**the Commission**) suggests that it is still important to provide 'a level of supervision' as follows:

When a child is not known to be in, on, or around water it is still important to provide a level of supervision to ensure that the child is protected from all hazards. Young children are unable to appropriately identify and negotiate risks, yet can be highly mobile ... Accordingly, it is essential that children under 5 years are regularly checked on by an active supervisor and that there are other

⁸⁰ Weiss, J, & the Committee on Injury, Violence, and Poison Prevention, 'Technical Report, Prevention of Drowning', *Pediatrics*, Vol 126, 1 July 2010, p. 257.

⁸¹ Petrass, L, Blitvich, J, Finch, C. 'Lack of caregiver supervision: a contributing factor in Australian unintentional child drowning deaths, 2000-2009', *The Medical Journal of Australia*, 2011, 194 (5) pp. 228-231.

⁸² Royal Life Saving Society Australia, *National Drowning Report 2015*, 2015, viewed 15 February 2016, p. 18, <http://www.royallifesaving.com.au/__data/assets/pdf_file/0006/14559/RLS_NDR2015_Report_LR.pdf>.

⁸³ Cantwell, G, and Alcock, J, *Drowning*, viewed 31 July 2017, <<http://emedicine.medscape.com/article/772753-overview>> p1.

⁸⁴ Formerly the Commission for Children and Young People and Child Guardian.

protections to reduce the risk of drowning (or access to other hazards) should there be a lapse in supervision.⁸⁵

The Commission also noted that, in regard to drowning deaths:

It is important to acknowledge that not all drowning deaths are reasonably foreseeable or the result of a breakdown in the elements of supervision occurring for the child. Sometimes a child is not known to be in, on, or around water and is being appropriately supervised by a capable supervisor, but a resourceful and inquisitive child may manage to bypass protections, unbeknown to the supervisor. These child deaths highlight the importance of having many and varied protections in place for the child, inclusive of adequate supervision.⁸⁶

In 2012-13, the Commission for Children and Young People and Child Guardian (which went on to become the Commission)⁸⁷ developed a 'revised drowning supervision model for children under 5 years'⁸⁸ (**the Commission's model**) and used this to analyse the levels of supervision associated with deaths by drowning of Queensland children under five years of age. The Commission described its model as follows:

The model examines drowning deaths in categories based on whether the child was known, or not known, to be in, on, or around water. This is because the threshold of supervision required for children known to be in, on, or around water is higher due to the presence of a significant hazard, than that of children not known to be in, on, or around water.

The key elements of supervision examined are:

- the capacity of the supervisor
- the proximity of the supervisor to the child, and
- the continuity of supervision.⁸⁹

The Office analysed the records of the six children aged under five years who died by drowning, and who were known to be in, on, or around water, to determine whether each child was under active supervision. For this analysis, the Office adopted the Commission's model, along with information from other research literature, as outlined in Figure 25. In the Office's analysis, all three elements (capacity of the supervisor, proximity of the

⁸⁵ Queensland Family and Child Commission, *Annual Report: Deaths of children and young people 2013-14*, 2014, viewed 11 April 2016, <<http://www.qfcc.qld.gov.au/knowledge-and-resource-hub/annual-report-deaths-children-and-young-people-queensland-2013-14>>, p. 49.

⁸⁶ Queensland Family and Child Commission, *Annual Report: Deaths of children and young people 2013-14*, 2014, viewed 11 April 2016, <http://www.qfcc.qld.gov.au/knowledge-and-resource-hub/annual-report-deaths-children-and-young-people-queensland-2013-14>>, p. 45.

⁸⁷ The Commission for Children and Young People and Child Guardian ceased operations on 30 June 2014 with the Commission being established on 1 July 2014, and the child death register functions formerly held by the Commission for Children and Young People and Child Guardian becoming the responsibility of the Commission.

⁸⁸ Commission for Children and Young People and Child Guardian, *Annual Report: Deaths of children and young people Queensland 2012-13*, 2013, viewed on 12 December 2016, <<http://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2014/5414T4621.pdf>>, p. 44.

⁸⁹ Queensland Family and Child Commission, *Annual Report: Deaths of children and young people 2013-14*, 2014, viewed 11 April 2016, <<http://www.qfcc.qld.gov.au/knowledge-and-resource-hub/annual-report-deaths-children-and-young-people-queensland-2013-14>>, p. 49.

supervisor to the child and continuity of supervision) needed to be in place to meet the definition of 'active supervision' of children known to be in, on, or around water.

Figure 25: Active supervision of children aged under five years known to be in, on, or around water

Element	Characteristics of this element for active supervision of children known to be in, on, or around water
Capacity	Supervisor is a capable adult and their capacity is not impaired by alcohol or other drug use ⁹⁰
Proximity	Supervisor is within arms' reach of the child ⁹¹
Continuity	Supervision of the child is continuous without distraction ⁹²

Source: Ombudsman Western Australia and Commission for Children and Young People and Child Guardian

The findings of the Office's analysis are set out below.

4.1.2 Of the 24 children aged under five years who died by drowning, six children were known to be in, on, or around water

Chapter 3 identifies that, of the 34 children who died by drowning, 24 children were aged under five years. The Office found that six (25 per cent) of these 24 children were known to be in, on, or around water. Five of these six children were in a bath or shower (Figure 26).

Figure 26: Children aged under five years who died by drowning, by known or not known to be in, on, or around water

Location	Child was known to be in, on, or around water	Child was not known to be in, on, or around water
Private swimming pool	0	13
Bath/shower	5	0
Dam/pond/river/ocean/lake	1	5
Total	6	18

Source: Ombudsman Western Australia

⁹⁰ The Western Australian Drug and Alcohol Office states that '[a] person is considered intoxicated on alcohol or other drugs when their functioning is significantly affected or impaired.' Mental Health Commission, *Intoxication*, <<https://vsu.mhc.wa.gov.au/about-vsui/intoxication/>>. The research literature also suggests that the capacity of the supervisor may be impaired if the supervisor is intoxicated or suffering the symptoms of withdrawal from alcohol use, for example '[r]outine tasks such as ... supervising children ... can become difficult when a parent is either intoxicated, hungover or suffering the symptoms of withdrawal from alcohol use.', Australian Institute of Family Studies, *An overview of alcohol misuse and parenting*, CFCA Resource Sheet, January 2015, viewed 3 April 2017, <<https://aifs.gov.au/cfca/publications/overview-alcohol-misuse-and-parenting>>, pp. 4-5.

⁹¹ Royal Life Saving Society Australia, *National Drowning Report 2015*, 2015, viewed 15 February 2016, p. 18, <http://www.royallifesaving.com.au/__data/assets/pdf_file/0006/14559/RLS_NDR2015_Report_LR.pdf>.

⁹² Royal Life Saving Society Australia, *National Drowning Report 2015*, 2015, viewed 15 February 2016, p. 18, <http://www.royallifesaving.com.au/__data/assets/pdf_file/0006/14559/RLS_NDR2015_Report_LR.pdf>.

4.1.3 None of the six children aged under five years who died by drowning, and who were known to be in, on, or around water, were under active supervision

The Office found that none of the six children aged under five years who died by drowning and who were known to be in, on, or around water were under active supervision. The Office's findings are summarised below (Figure 27).

Figure 27: Elements of active supervision for the six children aged under five years who died by drowning and who were known to be in, on, or around water

Child	Capacity	Proximity	Continuity	Active adult supervision in place
1	✓	X	X	X
2	✓	✓	X	X
3	✓	✓	X	X
4	✓	X	X	X
5	✓	X	X	X
6	✓	X	X	X

Source: Ombudsman Western Australia

Further details regarding each of the elements of active supervision for these six children are as follows.

4.1.3.1 Capacity of supervisor

The Office found that, of the six children aged under five years who died by drowning and who were known to be in, on, or around water:

- all six children had adult supervisor/s; and
- for all six children, the records available to the Office during the Investigation did not record that the supervisor/s had consumed alcohol or drugs.

4.1.3.2 Proximity of supervisor

The Office found that, of the six children aged under five years who died by drowning and who were known to be in, on, or around water:

- two children were within arms' reach of the supervisor; and
- four children were not within arms' reach of the supervisor.

4.1.3.3 Continuity of supervision

The Office found that, of the six children aged under five years who died by drowning and who were known to be in, on, or around water:

- for two children, their (sole) supervisor was distracted by household chores or caring for other children;
- for two children, their (sole) supervisor was distracted by a television, personal computer or mobile device; and

- for two children, their supervisor or supervisors were distracted by sleeping, showering, using the toilet or other activities.

The Office's findings set out in this Chapter regarding distractions causing lapses in supervision are consistent with the findings of the New South Wales Child Death Review Team, that a short lapse of supervision rather than a complete absence of supervision, was common in children reported to have drowned.⁹³ In this regard, the New South Wales Child Death Review Team noted that:

While the level of supervision for some of the children who drowned was significantly inadequate, many of the children were unsupervised for relatively short periods of time, often as a result of a momentary lapse in direct supervision by parent(s) or carers.⁹⁴

This is also consistent with international research, which found that:

... in a study of 496 drowning deaths in children younger than 14 years that were reviewed by state child-death review teams, only 10% were completely unsupervised at the time of the drowning.⁹⁵

4.1.4 Two of the six children aged under five years who died by drowning in the bath or shower had been placed in a seat in the bath without active supervision

In its analysis of the circumstances of the deaths of the six children under five years of age who died by drowning and who were known to be in, on, or around water, the Office found that four (67 per cent) of these six children were aged under one year. Two of these four children had been placed in a bath seat or in a floor seat in the bath without active supervision.

The research literature has identified that:

In Australia, on average, 5 children under the age of five drown and 47 are hospitalised due to bathtub drowning incidents each year. One in four hospitalisations results in permanent injury such as brain damage.⁹⁶

⁹³ New South Wales Death Review Team, 'Child deaths: drowning deaths in private swimming pools in NSW, Issues Paper No 1', 2012, viewed 27 July 2015, <https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0019/5752/IP_CDRT01_Private-Swimming-Pools.pdf>, p.2.

⁹⁴ New South Wales Death Review Team, 'Child deaths: drowning deaths in private swimming pools in NSW, Issues Paper No 1, 2012, viewed 27 July 2015, <https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0019/5752/IP_CDRT01_Private-Swimming-Pools.pdf>, p.2.

⁹⁵ Weiss, J, & the Committee on Injury, Violence, and Poison Prevention, 'Technical Report, Prevention of Drowning', *Pediatrics*, 126, 2010, p. 255, citing Cody, B, et al, 'Clear Danger: A National Study of Childhood Drowning and Related Attitudes and Behaviours, 2004.

⁹⁶ Royal Life Saving Society Australia, *Keep Watch @ Bath Time, Prevent your child from drowning*, viewed 12 April 2016, <http://www.royallifesaving.com.au/__data/assets/pdf_file/0018/3942/KW_BathTime_A4toDL_final.pdf>, p. 2.

With respect to bath seats, an association between drowning in the bath and the unsupervised use of bath aids, which include bath seats and rings, has been recognised by the Australian Competition and Consumer Commission (**the ACCC**) as follows:

In Australia, between 1997 and 2005, six infants under 13 months drowned while in a baby bath aid.⁹⁷

The ACCC has identified four hazard scenarios relating to the unsupervised use of bath seats in particular, which can lead to drowning incidents. These are:

- ...
- the child slips off, rolls off or climbs out of the seat
- the child becomes trapped in the seat openings
- another child in the bath plays roughly and pushes the young child out of the bath aid or tips the child over with the bath aid
- the bath seat tips over.⁹⁸

The ACCC also observes that:

Drowning can occur within seconds, silently and even if the water is only a few centimetres deep. If children are revived from near-drowning they may suffer permanent brain injury from lack of oxygen to the brain.⁹⁹

Mandatory standards for bath aids came into effect on 13 May 2005.¹⁰⁰ These mandatory standards are set out in the *Trade Practices (Consumer Product Safety Standard) (Baby Bath Aids) Regulations 2005 (Commonwealth)* and require warnings relating to the need for adult supervision to be provided on bath aids, as follows:

5. Form and content of warning

- (1) Subject to subregulation (4), a baby bath aid and any packaging in which the baby bath aid is supplied must bear a warning containing:
 - (a) a notice stating “WARNING — Children have DROWNED while using bath aids. This is NOT a safety device. ALWAYS keep baby within arm’s reach. NEVER leave baby in care of children.”; and
 - (b) 2 safety alert symbols, placed immediately to the left and right of the notice.

With respect to floor seats, the Coroner investigated the drowning of one child placed in a Bumbo™ [floor seat] in a shower and observed the Bumbo™ seat should not be used in the bath or shower. The Coroner found that:

⁹⁷ Australian Competition and Consumer Commission, *Product Safety Bulletin for business, What you need to know about; Baby bath aids*, 2013, viewed 12 April 2017, <https://www.accc.gov.au/system/files/659_Product%20safety%20bulletin_baby%20bath%20aids_FA2.pdf>.

⁹⁸ Australian Competition and Consumer Commission, Product Safety Australia, *Baby Bath Aids*, viewed 12 April 2017, <<https://www.productsafety.gov.au/products/babies-kids/kids-equipment/baby-bath-aids>>.

⁹⁹ Australian Competition and Consumer Commission, Product Safety Australia, *Baby Bath Aids*, viewed 12 April 2017, <<https://www.productsafety.gov.au/products/babies-kids/kids-equipment/baby-bath-aids>>.

¹⁰⁰ Australian Competition and Consumer Commission, *Product Safety Bulletin for business, What you need to know about; Baby bath aids*, 2013, viewed 12 April 2017, <https://www.productsafety.gov.au/_Product%20February20safety%20bulletin_baby%20bath%20aids_FA2.pdf>, p1.

... the Bumbo seat was expressly not designed for use in water and was unsafe for such use ... [being left unattended is] contrary to the Bumbo seat manufacturer's instructions, and also contrary to general recommendations for child safety around water... [It] is a timely reminder to other parents of why they must remain vigilant whenever their children are near water, whether it is at home or elsewhere.

It should also alert other parents who own a Bumbo seat to the need to carefully read the warnings on the product and be aware that it is not designed for use in the bath or shower.¹⁰¹

In Western Australia, the (then) Department of Commerce (the new Department of Mines, Industry Regulation and Safety) 'provides consumers and traders with access to a fair and competitive marketplace by providing advice and assistance to the community.'¹⁰²

More specifically, the (then) Department of Commerce provided the following services:

Consumer Protection¹⁰³

- provides information and advice to consumers and traders about their rights and responsibilities;
- helps consumers resolve disputes with traders;
- monitors compliance with consumer protection legislation;
- investigates complaints about unfair trading practices;
- prosecutes unscrupulous traders;
- regulates and licenses a range of business activities; and
- develops, reviews and prepares amendments to legislation that protects consumers.¹⁰⁴

The (then) Department of Commerce informed the Office that its officers conduct routine inspections of regulated items in Western Australia, including baby bath aids. Where issues of non-compliance are identified, the (then) Department of Commerce informed the Office that it ensures that the issues are rectified or negotiates the removal of these products via voluntary recalls.

The (then) Department of Commerce informed the Office that where officers identify non-regulated items that pose a safety hazard when used as intended, or where there is a risk associated with a foreseeable misuse, the (then) Department of Commerce also investigates these items and considers ways of having them removed from the marketplace.

With respect to Bumbo floor seats in particular, the (then) Department of Commerce informed the Office that:

Bumbo seats are not subject to regulation within the product safety specific provisions [of Australian Consumer Law], however Bumbo International Trust, the

¹⁰¹ Western Australian Coroner Sarah Linton, *Inquest into the death of TPL (A Child)*, Coroner's Court of Western Australia, Perth, 2 February 2016, pp. 11-12.

¹⁰² Department of Commerce, *Annual Report 2015-16*, 2016, accessed 4 May 2017, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/doc_ar_2015-2016.pdf>, p. 25.

¹⁰³ Consumer Protection is a division within the Department of Mines, Industry Regulation and Safety.

¹⁰⁴ Department of Commerce, *Annual Report 2015-16*, 2016, accessed 4 May 2017, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/doc_ar_2015-2016.pdf>, p. 7.

manufacturers of the Bumbo Baby Seat, recognised that whilst the product was safe for its intended use, on the floor and with adult supervision, there were some potential hazards associated with misuse.

In 2012, a voluntary recall of the Bumbo Baby Seat was instituted that enabled consumers to order and install a free repair kit including a restraint belt with a warning label, installation instructions, safe use instructions and a new warning sticker.

Recommendation 1

The Department of Mines, Industry Regulation and Safety continues to develop and implement strategies for educating parents and caregivers regarding the importance of maintaining active supervision of children who are placed in bath seats and of avoiding altogether the use of floor seats in the bath or shower.

In addition, the (then) Department of Commerce informed the Office that it monitors deaths and serious injuries of children using data collected nationally through mandatory reporting, complaints and media monitoring, meets regularly with other Australian Consumer Law regulators to discuss this data and the product safety issues it identifies, and through this mechanism, the (then) Department of Commerce monitors the need for further strategies, including regulatory intervention, to prevent child deaths and serious injuries.

Recommendation 2

The Department of Mines, Industry Regulation and Safety continues to monitor data specifically regarding fatal and non-fatal drowning incidents that occur in the bath and, if warranted, pursue the development of further regulation applicable to the products associated with these incidents.

4.1.5 None of the 18 children aged under five years who died by drowning, and who were not known to be in, on, or around water, were under active supervision

As outlined above, the Commission suggested that even when children aged under five years are not known to be in, on, or around water, it is essential that they are regularly checked on by their supervisor.¹⁰⁵

For completeness, the Office also analysed, for the 18 children aged under five years who died by drowning and who were not known to be in, on, or around water, whether or not these children were under active supervision, using the framework set out at Figure 25. The Office is aware that the framework for active supervision set out at Figure 25 applies a higher standard than being 'regularly checked on'. For this reason, some further qualitative information, particularly regarding continuity of supervision, is also provided.

The Office found that none of the 18 children aged under five years who died by drowning and were not known to be in, on, or around water were under active supervision. This is consistent with the Commission's findings, in relation to drowning deaths of children aged

¹⁰⁵ Queensland Family and Child Commission, *Annual Report: Deaths of children and young people 2013-14, 2014*, viewed 11 April 2016, <<http://www.qfcc.qld.gov.au/knowledge-and-resource-hub/annual-report-deaths-children-and-young-people-queensland-2013-14>>, p. 49.

under five years, who were not known to be in, on, or around water, which the Commission summarised as follows:

While the capacity and proximity of the supervisor were appropriate, there was a noted breakdown in the continuity of supervision in each death.¹⁰⁶

The Office's findings are summarised below (Figure 28).

Figure 28: Elements of active supervision for the 18 children aged under five years who died by drowning and who were not known to be in, on, or around water

Child	Capacity	Proximity	Continuity	Active supervision
1	✓✓	XX	XX	XX
2	✓✓	XX	XX	XX
3	✓✓	XX	XX	XX
4	✓✓	XX	XX	XX
5	✓	X	X	X
6	✓✓	XX	XX	XX
7	✓	X	X	X
8	✓NR	XX	XX	XX
9	✓	X	X	X
10	✓	X	X	X
11	✓	X	X	X
12	✓✓	XX	XX	XX
13	✓NR	XX	XX	XX
14	✓✓	XX	XX	XX
15	✓	X	X	X
16	✓	X	X	X
17	✓	X	X	X
18	✓	X	X	X

Source: Ombudsman Western Australia

Note: xx or ✓✓ denotes that there were two supervisors recorded for this child; ✓NR denotes that there were two supervisors and the proximity of one supervisor was not recorded; NR denotes not recorded.

Further details regarding each of the elements of supervision for these 18 children are as follows.

4.1.5.1 Capacity of supervisor

The Office found, for the 18 children aged under five years who died by drowning and who were not known to be in, on, or around water:

- all of the 18 children had at least one adult supervisor; and
- for all 18 children, the records available to the Office did not record that the supervisor had consumed alcohol or drugs.

¹⁰⁶ Queensland Family and Child Commission, *Annual Report: Deaths of children and young people 2013-14, 2014*, viewed 11 April 2016, <<http://www.qfcc.qld.gov.au/knowledge-and-resource-hub/annual-report-deaths-children-and-young-people-queensland-2013-14>>, p. 49.

4.1.5.2 Proximity of supervisor

The Office found, for the 18 children aged under five years who died by drowning and who were not known to be in, on, or around water:

- none of the 18 children were within arms' reach of the supervisor at the time of the fatal drowning incident. When the children were last sighted:
 - eleven children had been inside the house with the supervisor;
 - six children had been outside the house with the supervisor or outside the house and the supervisor was inside the house; and
 - one child's location was not recorded.

4.1.5.3 Continuity of supervision

The Office found, for the 18 children aged under five years who died by drowning and who were not known to be in, on, or around water:

- none of the 18 children were under continuous supervision;
- two children were last sighted within five minutes of their supervisor or supervisors identifying their absence and their supervisor or supervisors were distracted by a television, personal computer or mobile device, attending to household chores or using the toilet;
- five children were last sighted within five to 10 minutes of the supervisor identifying their absence. For these children, their supervisor or supervisors were distracted by household chores, working outside, caring for additional children, loading items into a car or engaging in a conversation with another person or were sleeping.
- nine children were last sighted more than 10 minutes prior to the supervisor identifying their absence:
 - for six children, their supervisor or supervisors were distracted by household renovation work, household chores, caring for other children, taking a shower or other household tasks; and
 - for three children, one supervisor thought the child was with the other supervisor and vice versa, or it was not recorded why their supervisor or supervisors had not sighted the child.
- for two children, the length of time between the supervisor last sighting the child and the supervisor identifying their absence was not recorded. For both children, two supervisors were recorded and the supervisors were sleeping, resting or engaging in a conversation with another party.

4.1.6 Of the 24 children aged under five years who died by drowning, 18 children were not known to be in, on, or around water

The Office found that, of the 24 children aged under five years who died by drowning, 18 (75 per cent) children were not known to be in, on, or around water. Of these 18 children:

- for 13 children (72 per cent), the location of the fatal drowning incident was a private swimming pool; and
- for five children (28 per cent), the location was a dam, pond, river, ocean or lake.

4.1.7 Of the 10 children aged five years and over who died by drowning, eight children were known to be in, on, or around water, and for six of these children the location of the fatal drowning incident was a river, ocean, lake, dam or pond

The Office found that, of the 10 children aged five years and over who died by drowning, eight (80 per cent) children were known to be in, on, or around water. For six (60 per cent) of the 10 children, the location of the fatal drowning incident was a river, ocean, lake, dam or pond (Figure 29).

Figure 29: Children aged five years and over who died by drowning, by known or not known to be in, on, or around water

Location	Child was known to be in, on, or around water	Child was not known to be in, on, or around water
Private swimming pool	1	2
Bath/shower	1	0
River/ocean/lake/dam/pond	6	0
Total	8	2

Source: Ombudsman Western Australia

The Office also found that, of the eight children who were known to be in, on, or around water, half were aged between five and nine years. The research literature suggests that children of this age must be 'supervised within line of sight at all times'¹⁰⁷ when they are known to be in, on, or around water.

4.2 Swimming pool barriers

4.2.1 Thirteen children aged under five years who died by drowning in a private swimming pool were not known to be in, on, or around water; a suitable swimming pool barrier may have restricted their access to the swimming pool

The analysis set out at section 4.1.6 identifies that, of the 24 children aged under five years who died by drowning, 18 children (75 per cent) were not known to be in, on, or around water. For 13 of these 18 children, the location of the fatal drowning incident was a private swimming pool. The Office also found that while none of these 13 children were under active supervision 'not all drowning deaths are reasonably foreseeable or the result

¹⁰⁷ Watch Around Water, *Welcome to Watch Around Water*, viewed 3 April 2017, <<http://www.watcharoundwater.org.au/>>.

of a breakdown in the elements of supervision occurring for the child. Sometimes a child is not known to be in, on or around water and is being appropriately supervised'.¹⁰⁸ As discussed at section 4.1.1 'when a child is not known to be in, on, or around water it is still important to provide a level of supervision to ensure that the child is protected from all hazards ... It is essential that children under 5 years are regularly checked on by an active supervisor and that there are other protections to reduce the risk of drowning ... should there be a lapse in supervision'.¹⁰⁹

Swimming pool barriers act as a second line of defence for when a child is not known to be in, on, or around water. As discussed in further detail at section 6.1.1, regulation 50(1) of the *Building Regulations 2012* provides that:

50. Barrier to private swimming pool

- (1) Each owner and occupier of premises on which there is a private swimming pool containing water that is more than 300 mm deep must ensure that there is installed or provided around the pool a barrier that restricts access by young children to the pool and its immediate surrounds.

The barrier effectively provides this second line of defence. The *Building Regulations 2012* further provide for how a barrier to a private swimming pool is to be taken to be suitable for this purpose. The research literature has also identified that the strengthening of pool safety requirements over time has been associated with fewer fatal and non-fatal drowning incidents.¹¹⁰

4.2.2 All 13 children aged under five years, not known to be in, on, or around water, who died by drowning in a private swimming pool, died in a private swimming pool with either no barrier, a defective barrier, or a climbable object near the permanent barrier

The research literature also identifies that most fatal drowning incidents in private swimming pools occur where there is no barrier or a faulty barrier between the residence and the swimming pool area.¹¹¹ A review of the research literature, undertaken by the Cochrane collaborative research network, which included three case-control studies researching the efficacy of swimming pool barriers, found that barriers significantly reduce the risk of drowning.¹¹² The Office analysed the effectiveness of the swimming pool barrier for the 13 children aged under five years who died by drowning following an incident in a private swimming pool that were not known to be in, on or around water. The Office found that of these 13 children who died by drowning following an incident in a private swimming pool:

¹⁰⁸ Queensland Family and Child Commission, *Annual Report: Deaths of children and young people 2013-14*, 2014, viewed 11 April 2016, <<http://www.qfcc.qld.gov.au/knowledge-and-resource-hub/annual-report-deaths-children-and-young-people-queensland-2013-14>>, p. 45.

¹⁰⁹ Queensland Family and Child Commission, *Annual Report: Deaths of children and young people 2013-14*, 2014, viewed 11 April 2016, <<http://www.qfcc.qld.gov.au/knowledge-and-resource-hub/annual-report-deaths-children-and-young-people-queensland-2013-14>>, p. 49.

¹¹⁰ Lambert, M, *Independent Review Swimming Pool Barrier Requirements for Backyard Swimming Pools in NSW – Discussion Paper*, State of New South Wales, 2015, p. 6.

¹¹¹ Peden, A, and Mahony, A, *Drowning Deaths of Children Under Five in Private Swimming Pools in NSW: A 13 Year Review*, Royal Life Saving Society Australia, Sydney, 2016, pp. 4-5.

¹¹² Thompson, D, & Rivara, F, *Pool fencing for preventing drowning of children*. Cochrane Database of Systematic Reviews, 1998, p. 2.

- four (31 per cent) children died by drowning following an incident in a private swimming pool without any barrier;
- five (38 per cent) children died by drowning following an incident in a private swimming pool where the permanent barrier gate was propped open or there was a climbable object near the permanent barrier;
- three (23 per cent) children died by drowning following an incident in a private swimming pool where the permanent barrier gate latch or door latch (in the case of a three-sided barrier, which is defined further below) did not close, either because the latch was defective or had been disabled; and
- one (8 per cent) child died by drowning following an incident in a private swimming pool where a section of a temporary barrier had been propped open.

In summary, all 13 of the children aged under five years, not known to be in and around water, who died by drowning in a private swimming pool, died in a private swimming pool with either no barrier, a defective barrier or a climbable object near the permanent barrier. This highlights the importance of private swimming pools being enclosed by a barrier, which effectively restricts access by young children to the swimming pool.

The Office's findings are consistent with the findings of the New South Wales Child Death Review Team's review of swimming pool drowning deaths of 40 children in 39 private swimming pools between 2007 and 2011. This review found that:

Information about the standard of safety barriers was available for 37 of the 39 pools. In most cases this included pool and child safety barrier assessments carried out by police crime scene investigators and/or local council inspectors after the drowning incident. The large majority of pools (33 of the 37), had either no barrier installed, or the existing barrier was defective/non-compliant.¹¹³

Other New South Wales research literature also suggests that, in New South Wales,

Predominantly it is young children, aged under five years, who drown in private swimming pools, with six drowning deaths in 2014-15. Each of these drownings involved inadequate barriers, with the weak link in most cases being the gate and latch. All involved the absence or diversion of attention of adult supervision.¹¹⁴

4.2.3 For six of the eight children who died by drowning following an incident in a private swimming pool with a permanent barrier, this barrier was a three-sided barrier

The relevant literature defines a three-sided and four-sided fence as follows:

3-sided [f]encing - a fence and building wall restricts access to the pool by a toddler but there is restricted access via a house-door from the house to the pool.

¹¹³ New South Wales Child Death Review Team, New South Wales Ombudsman, *Submission to the Swimming Pools Act 1992 Review*, February 2012, pp. 3-4.

¹¹⁴ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements – Discussion Paper*, State of New South Wales, 2015, pp. 9-10.

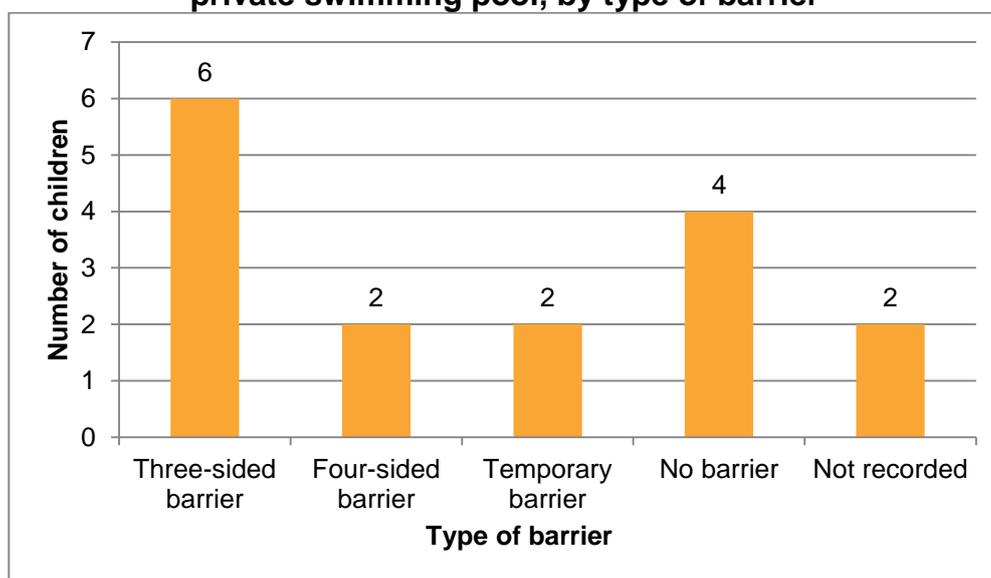
4-sided [f]encing - a fence or building wall restricts access to the pool by a toddler and there is no direct door access from the house to the pool but may include a window.¹¹⁵

The Office found that, of the 16 children who died by drowning following an incident in a private swimming pool:

- six (38 per cent) children died by drowning following an incident in a private swimming pool with a three-sided barrier;
- two (12 per cent) children died by drowning following an incident in a private swimming pool with a four-sided barrier;
- two (12 per cent) children died by drowning following an incident in a private swimming pool with a temporary barrier;
- four (25 per cent) children died by drowning following an incident in a private swimming pool without any barrier; and
- for two (12 per cent) children, the presence of a barrier was not recorded (Figure 30).

That is, for six (75 per cent) of the eight children who died by drowning following an incident in a private swimming pool with a permanent barrier, the private swimming pool had a three-sided barrier with restricted access via a door from the house to the swimming pool.

Figure 30: Children who died by drowning in a private swimming pool, by type of barrier



Source: Ombudsman Western Australia

This issue was also identified in 2013 by the Coroner in an inquest undertaken in the case of a child who died by drowning. The Coroner recommended as follows:

¹¹⁵ Barker, R, Spinks, D, Hockey, R, and Pitt, R. *Pool Fencing Legislation in Australia in 2003: The Way Forward*, Queensland Injury Surveillance Unit, 2003, p. 2.

Recommendation 2:

The Building Commission consider adopting a proposal to phase out the use of child resistant doors as barriers between houses and swimming pools.¹¹⁶

This issue is considered again and discussed in more detail at section 6.6.3.

4.3 Swimming skills

4.3.1 Research literature

In the research literature, the Australian Water Safety Council recognises the general need for children of all ages to have basic swimming skills, stating that:

In order to prevent drowning, every Australian child must have basic swimming and water safety skills and knowledge of how to be safe when they are in, on, or around the water.¹¹⁷

The value of teaching children aged over five years to swim is widely accepted, as follows:

Currently, there appears to be little controversy regarding recommendations to teach older children how to swim. Policies of the American Academy of Pediatrics recommend that over the age of 5 years, all children learn how to swim.¹¹⁸

Few studies have analysed the relationship between swimming lessons and the risk of drowning for children younger than five years of age.¹¹⁹

4.3.2 Of the 34 children who died by drowning, 17 were recorded as having weak or no swimming skills, bearing in mind that 14 of these 17 children were aged under five years

The Office found that, of the 34 children who died by drowning:

- fifteen (44 per cent) children were recorded as having no swimming skills;
- two (six per cent) children were recorded as having weak swimming skills;
- five (15 per cent) children were recorded as being competent swimmers; and
- the swimming ability of 12 (35 per cent) children was not recorded.¹²⁰

However, it should be noted that, of the 17 children recorded as having weak or no swimming skills, 14 were aged under five years.

¹¹⁶ Western Australian Coroner Barry King, *Inquest into the death of name withheld (A Child)*, Coroner's Court of Western Australia, Kalgoorlie, 30 October 2013, p. 35.

¹¹⁷ The Australian Water Safety Council, *The Australian Water Safety Strategy 2012-15*, 2015, Sydney, 2012, viewed 19 January 2015, <http://watersafety.com.au/Portals/0/AWSC%20Strategy%202012-15/AWSC_Strategy2012_Brochure%20-%20Lowres.pdf>, p. 15, citing Royal Life Saving Society Australia, *No Child to Miss Out: Basic Swimming & Water Safety Education – The Right of All Australian Children*, Royal Life Saving Society Australia, 2012, p. 3.

¹¹⁸ Brenner, R, Saluja, G, Smith, G, 'Swimming lessons, swimming ability and the risk of drowning', *Injury Control and Safety Promotion*, 2003, Vol. 10, No. 4, p. 214.

¹¹⁹ See for example, Weiss, J, & the Committee on Injury, Violence, and Poison Prevention, 'Technical Report, Prevention of Drowning', *Pediatrics*, 126, 1 July 2010, pp. 253-262.

¹²⁰ In this section, the Office has developed the categories used based on information recorded in police reports.

The Office also found that, of the 16 children who died by drowning following an incident in a private swimming pool, 10 (63 per cent) children were recorded as having no swimming skills. Nine of these 10 children (90 per cent) were aged under five years.

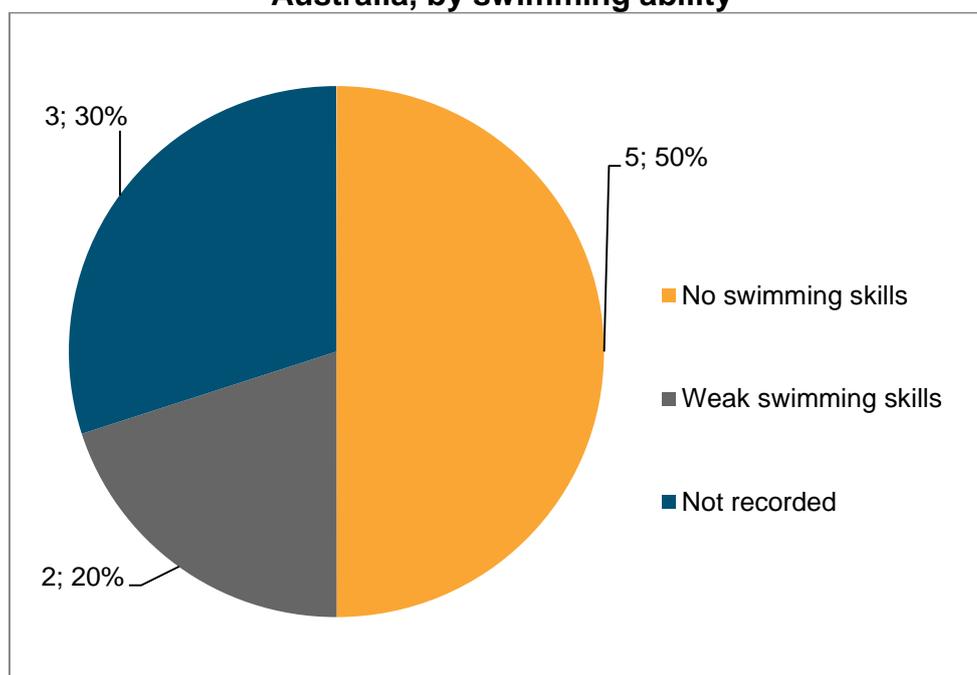
4.3.2.1 Children who were either born outside Australia or had a parent born outside Australia

As outlined in section 3.2.4, of the 34 children who died by drowning, 10 (29 per cent) children were either born overseas or had a parent born overseas. The Office found that, of these 10 children:

- five (50 per cent) children were recorded as having no swimming skills and all of these children were aged under five years.
- two (20 per cent) children were recorded as having weak swimming skills and both of these children were of primary school age; and
- the swimming ability of three (30 per cent) children was not recorded (Figure 31).

In summary, seven (70 per cent) of the 10 children who died by drowning and who were born outside Australia or had a parent born outside Australia were recorded as having weak or no swimming skills.

Figure 31: Children who died by drowning and were born outside Australia or had a parent born outside Australia, by swimming ability



Source: Ombudsman Western Australia

The Office did not find that the recorded swimming ability of the children who were either born outside Australia or had a parent born outside Australia was less than that of other children who died by drowning. The research literature does suggest that there 'is evidence to suggest up to 80% of people from CALD (culturally and linguistically diverse)

communities cannot swim'.¹²¹ In its report on the swimming ability of Victorian primary school students in Victoria, Life Saving Victoria stated that:

40% of parents said their child had never participated in a school-run swimming program and 12% of surveyed school teachers reported their school did not run a swimming program. The case for in-school provision of swimming and water safety education is strong because access to swimming lessons is easier if they are part of the school program. This may enable the participation of children who might otherwise not engage in physical activity such as those from CALD, Indigenous or low socio-economic backgrounds.¹²²

In its 2010-2011 Victorian Drowning Report, Life Saving Victoria also states:

Due to the potential for increased drowning risk for people new to Australia, as well as those with little or no experience with Australian aquatic environments, more work is urgently needed in this area.¹²³

4.3.2.2 *Aboriginal and Torres Strait Islander children*

As outlined in section 3.2.5, of the 34 children who died by drowning, five (15 per cent) were recorded as being Aboriginal and no children were recorded as being Torres Strait Islander. The Office found that, of these five children:

- one child was recorded as having no swimming skills and this child was aged under five years;
- two children were recorded as having weak swimming skills and both of these children were aged five to nine years; and
- the swimming ability of two children was not recorded.

4.3.2.3 *The availability of formal swimming lessons*

With regard to formal swimming lessons for Western Australian children aged five years and over, the Western Australian Department of Education states that:

With swimming pools and beaches a part of the Western Australian lifestyle, ensuring your children can swim competently and safely is a must for all families.¹²⁴

The Department of Education operates an Interm swimming program, which it reports 'is a school-based program for children from Pre-primary to Year 7'.¹²⁵ The Department of Education further describes the program and its uptake, as follows:

¹²¹ Life Saving Victoria, Melbourne, '2010/2011 Victorian Drowning Report', viewed 29 March 2016, <http://www.lifesavingvictoria.com.au/resources/documents/LSV_Drowning_Report_FA_2.0_single_pages.pdf>, p. 6.

¹²² Life Saving Victoria, Birch R and Matthews B, 'Sink or Swim: The state of Victorian primary school children's swimming ability' 2013, viewed 7 April 2016, <<https://lsv.com.au/wp-content/themes/abomb/pdf/research/Sink%20or%20Swim%20executive%20summary.pdf>>, pp. 4-5.

¹²³ Life Saving Victoria, '2010/2011 Victorian Drowning Report', 2011, viewed 29 March 2016, <http://www.lifesavingvictoria.com.au/resources/documents/LSV_Drowning_Report_FA_2.0_single_pages.pdf>, p. 10.

¹²⁴ Department of Education, 'Swimming and Water safety', viewed 7 April 2017, <<http://www.education.wa.edu.au/cwebt/at-school/swimming/interm-swimming>>.

The Department of Education meets the cost of Interm swimming lessons for all primary students in public schools and for primary students in rural and remote areas. The program is also available to primary students in private schools in the metropolitan area on a user pays basis ... Parents and carers usually need to pay a fee to cover transport and entry costs into the swimming venue.¹²⁶

However, at interview, Royal Life Saving Society Western Australia (**RLSSWA**) identified that some private schools do not participate in the Interm swimming program due to the costs of student transport, the cost of additional teachers to provide the necessary levels of supervision and parents' concerns.

With regard to formal swimming lessons for children younger than five years, the Interm swimming program is not available to children before they attend primary school. Therefore, for children aged four years and under, formal swimming lessons need to be sought and paid for by parents. Data on this is not collected systematically.

4.4 Cardiopulmonary resuscitation

The research literature suggests that immediate resuscitation at the site of a drowning incident, even before the arrival of emergency medical services personnel, is an important means of secondary prevention and is associated with a significantly better outcome for people with submersion injuries:

Prevention measures can reduce the incidence of drowning, and immediate, high-quality bystander CPR and early B[asic] L[ife] S[upport] care can improve survival.¹²⁷

The Office found that, of the 34 children who died by drowning:

- thirty one children (91 per cent) were located with sufficient time to commence cardiopulmonary resuscitation and this was commenced for all thirty one children before the arrival of emergency medical services personnel; and
- three children (9 per cent) were not located within sufficient time to commence cardiopulmonary resuscitation (that is, resuscitation was not attempted because there was a protracted amount of time before the child's body was located).

4.5 Other factors

4.5.1 Three of the 34 children who died by drowning were recorded as residing in a rental property

During the Investigation, the Office found that three children who died by drowning were recorded as residing at a rental property, two children were recorded as residing at a property owned by their parents and for 29 children this information was not recorded. Bearing in mind that the ABS 2011 Census of Population and Housing found that '[o]f

¹²⁵ Department of Education, 'Swimming and Water safety', viewed 7 April 2017, <<http://www.education.wa.edu.au/cwebt/at-school/swimming/interm-swimming/>>.

¹²⁶ Department of Education, 'Introduction to Interm Swimming', viewed 7 April 2017, <<http://www.det.wa.edu.au/curriculumssupport/swimming/detcms/navigation/interm-swimming/>>.

¹²⁷ American Heart Association, 'Drowning', *Circulation*, 2005, Part 10.3, 112: IV-133-IV-135.

occupied private dwellings in Western Australia (State/Territory), 29.5% were owned outright, 37.8% were owned with a mortgage and 29.2% were rented¹²⁸ this number may be understated.

Of the three children who died by drowning who were recorded as residing in a rental property:

- two children died by drowning following an incident in a private swimming pool at the rental property where they were residing and relevant information indicates that in both instances, a self-closing door to the house (which formed part of a three-sided swimming pool barrier) was defective. In both instances the Office was informed that the owners and, where applicable, the property manager had been advised about faults to the barriers, however, these faults had not been remediated; and
- one child died following an incident in a location other than a swimming pool at the rental property where this child was residing.

A child's voice¹²⁹

A child's carers were both at the rental property and had seen the child playing in the house some minutes before they noticed the child missing. One of the child's carers noticed that the sliding door was open and went out into the pool area. The carer found the child floating face up in the swimming pool. Although the child's carer pulled the child out of the swimming pool and immediately commenced cardiopulmonary resuscitation until ambulance officers arrived, the child died.

The swimming pool was approved for installation prior to 5 November 2001 and the three-sided fence complied with the Australian Standard AS 1926.1-1993. The security door at the child's house did not function properly, as it did not self-close and was difficult to open.

The Coroner found that the property condition report, completed before the child resided in the property, noted that the 'security sliding door to pool keeps coming off its rail'.¹³⁰ During the time the child resided in the property, the security door was removed on occasion because it would jam. The Coroner found that, despite a request to the property manager to repair the security door, neither the property manager nor the owner arranged for the security door to be repaired.

The Coroner, in an inquest undertaken in the case of one of the children who died by drowning, who was recorded as residing at a rental property, made four recommendations

¹²⁸ Australian Bureau of Statistics, *2011 Census QuickStats*, ABS, Canberra, March 2013, p. 5. Viewed 6 July 2017, <http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/5#mortgage-rent>.

¹²⁹ This case study is drawn from deaths notified to the Ombudsman's office. Each child's death is tragic and the Office endeavours to ensure that every child can be given a voice in its investigations. In doing so, the Office wishes to show respect to the child that has died and the child's family, as well as represent the child's voice in a way that may assist in preventing other child deaths. As part of this respect it is critical that names and other identifying information have been removed or changed.

¹³⁰ Western Australian Coroner Barry King, *Inquest into the death of name withheld (A Child)*, Coroner's Court of Western Australia, Kalgoorlie, 30 October 2013, p. 11.

about the safety and wellbeing of children around private swimming pools, particularly in a situation where the private swimming pool is part of a rental property. Two recommendations referred to the Real Estate Institute of Western Australia (**REIWA**) and the processes surrounding properties with private swimming pools as follows:

RECOMMENDATION 3:

The Western Australian Local Government Association consult with REIWA with a view to adopting a process whereby new tenants at properties at which there is a pool are notified of their right to notify local government as well as to the estate agent about matters relating to the safety of the pool.

...

RECOMMENDATION 4:

REIWA consider taking the appropriate steps to train property managers about the fundamental requirements of pool safety barriers and to encourage them to include basic assessments of such barriers when conducting property inspections.¹³¹

The Office's findings support the Coroner's focus on the important role to be played by the real estate industry, as well as private landlords about matters relating to the safety of private swimming pools at rental properties.

In Western Australia, the *Real Estate and Business Agents Act 1978* and the *Fair Trading Act 2010*, provide the framework for regulating real estate agents and property managers employed by them.

The new Department of Mines, Industry Regulation and Safety administers these responsibilities for regulating real estate agents, and the (then) Department of Commerce informed the Office that:

The Department of Commerce is responsible for regulating the real estate and settlement industry through:

- licensing of agents and sales representatives, including property managers who are regulated as a subset of sales representatives
- monitoring and enforcing compliance with legislation
- investigating complaints against a licensee, as well as all other persons licensed under the *Real Estate and Business Agents Act 1978* and against those performing real estate transactions without being appropriately licensed and/or registered.

The new Department of Mines, Industry Regulation and Safety also administers the *Residential Tenancies Act 1987* that regulates the relationship of lessors and tenants under residential tenancy agreements. Relevantly, the *Residential Tenancies Act 1987* defines 'urgent repairs' as 'repairs that are necessary ... to avoid ... exposing a person to the risk of injury'¹³² and prescribes the timeframes for the completion of those urgent repairs. This definition of 'urgent repair' captures defective swimming pool barriers.

¹³¹ Western Australian Coroner Barry King, *Inquest into the death of name withheld (A Child)*, Coroner's Court of Western Australia, Kalgoorlie, 30 October 2013, pp. 36-38.

¹³² *Residential Tenancies Act 1987*, section 43(1).

To fulfil its statutory obligations, the (then) Department of Commerce developed a range of regulatory strategies and guidelines designed to assist the real estate sector, landlords and tenants to understand their respective responsibilities under residential agreements, including complying with the safety requirements for swimming pool barriers located in rental properties.

These strategies and guidelines¹³³ include:

- codes of conduct;
- real estate agent sector and landlord infringements;
- mandatory continuous professional development for the real estate industry on basic assessment of pool safety and pool safety barriers;
- advice for tenants and landlords renting a property, including repairs and safety responsibilities;
- mandatory information forms that alert tenants to the rules regarding swimming pool barriers;
- amending the tenant's handbook to include information about swimming pool barriers and the tenant's right to undertake urgent repairs if they are not performed by a landlord or property manager;
- landlords tools and checklist, including a 'Lessor's Checklist'¹³⁴ that requires pool fencing to be checked as part of the property condition report and a 'Lessor's Guide'¹³⁵ that refers to the need for compliance with pool safety requirements;
- portable pools factsheets in a number of languages;¹³⁶
- landlord's bulletins,¹³⁷ introduced in March 2017, which have addressed, among other issues, smoke alarms. A further bulletin on safety around the home is planned and is proposed to include swimming pool barriers;
- real estate bulletin on pool and spa safety;¹³⁸
- a number of media releases on pool safety and subsequent media opportunities such as radio, television and print; and
- Frequently Asked Questions.

¹³³ Examples of some of these are available at the (then) Department of Commerce, Western Australia, '*Publications – real estate*', viewed 26 May 2017, <<https://www.commerce.wa.gov.au/consumer-protection/publications-real-estate>>.

¹³⁴ Department of Commerce, Western Australia, 'Landlords tools and checklist' viewed on 26 May 2017, <<https://www.commerce.wa.gov.au/consumer-protection/landlords-tools-and-checklist>>.

¹³⁵ Department of Commerce, Consumer Protection, Western Australia, '*Renting out your property – a lessor's guide*', viewed 26 May 2017, <<https://www.commerce.wa.gov.au/sites/default/files/atoms/files/lessorsguide.pdf>>.

¹³⁶ Available from the Department of Commerce, Western Australia website, Royal Life Saving Society Australia, 'Fact Sheet 01: What is a Portable Swimming Pool?', <<http://www.commerce.wa.gov.au/sites/default/files/atoms/files/rllsmakeitsafeportpool.pdf>>, and Royal Life Saving Australia, 'Fact Sheet 02: Portable Swimming Pool Safety Considerations', <<http://www.commerce.wa.gov.au/sites/default/files/atoms/files/rllsmakeitsafeportpool2.pdf>>.

¹³⁷ Department of Commerce, Western Australia, 'Landlord's bulletins', viewed on 26 May 2017, <<https://www.commerce.wa.gov.au/publications/landlords-bulletins>>.

¹³⁸ Department of Commerce, Consumer Protection, Western Australia, *Pool and Spa Safety*, Real Estate Industry e-Bulletin, Issue 62, 16 May 2014, <<http://www.commerce.wa.gov.au/sites/default/files/atoms/files/issue62poolandspasafety.pdf>>.

4.5.1.1 Approaches used in other jurisdictions

Government agencies in New South Wales and Queensland have also taken steps with regard to private swimming pools and their barriers at rental properties.

New South Wales Fair Trading (which is part of the New South Wales Department of Finance, Services and Innovation) has provided guidelines for consumers, which identify that, effective 29 April 2016, landlords or real estate agents of a rental property must provide a copy of a certificate of compliance for the swimming pool barrier of that property to the tenant at the time that a residential tenancy agreement is entered into, as follows:

From 29 April 2016 onwards, when a residential tenancy agreement is entered into for a property with a swimming pool or spa pool, the landlord or real estate agent must provide the tenant with a copy of the valid certificate of compliance or occupation certificate.

This requirement does not apply to a lot in a strata scheme or in a community scheme if that strata or community scheme has more than two lots.¹³⁹

In October 2016, the Queensland Government, Department of Housing and Public Works published *Guidelines for pool owners and property agents*. Section 4.3 of these guidelines outlines the requirement for property owners to ensure that a valid pool safety certificate is in effect before entering into a lease agreement with a potential tenant. While this certificate does not need to be provided to the tenant, the responsibilities of this process fall to the property manager or agent, as follows:

4.3 Leasing a property with a non-shared pool

Before entering into a lease or other accommodation agreement, property owners must ensure a valid pool safety certificate is in effect. This means a pool safety certificate must be in effect before signing the agreement, regardless of when the tenant starts residing at the property.

A copy of the certificate does not need to be given to the tenant. The responsibilities of agents in this process are outlined in section 4.5 of these guidelines.

...

4.5 Role of property agents

If a property agent collects commissions in connection with a lease or other accommodation agreement where no pool safety certificate has been obtained for a non-shared pool, they may be liable for disciplinary proceedings under the *Property Occupations Act 2014*.

In some cases, owners may request property agents to attend to pool safety matters on their behalf. Property agents need to be aware of three key forms:

¹³⁹ Fair Trading NSW Government, *Fact Sheet: Swimming Pools, Safety guidelines for consumers*, viewed 16 September 2016, <http://www.fairtrading.nsw.gov.au/ftw/consumers/product_and_service_safety/pool_safety/swimming_pools.page#top>.

- Form 23—Pool safety certificate, for pools that comply
- Form 36—Notice of no pool safety certificate (for sales of shared and non-shared pools and leases of shared pools that do not have a pool safety certificate).
- Form 26—Pool safety nonconformity notice (see section 8.7 for information about this form)

Property agents can use the online pool safety register at www.qbcc.qld.gov.au/home-building-owners/pool-safety/registering-your-pool to check whether a valid pool safety certificate is in effect for a pool.

The Real Estate Institute of Queensland and the Queensland Law Society amended the standard sale contracts to include matters relating to pool safety. They have also published guidance material about the current pool safety laws for their members.¹⁴⁰

In Western Australia, several local government survey respondents also suggested that a requirement to provide a certificate of compliance for swimming pool barriers when selling or leasing a property with a private swimming pool could assist in maintaining the safety of children. In addition, if a copy of the certificate of compliance was provided to the new owner or tenant, it could provide contact details for the relevant local government should any further information be requested.

Recommendation 3

Taking into account the findings of the Investigation, and the findings and recommendations of the Coroner regarding private swimming pools at rental properties, the Department of Mines, Industry Regulation and Safety develops and implements further strategies designed to ensure that real estate agents, including property managers, and private landlords, respond appropriately to information regarding swimming pool barriers that do not comply with the *Building Act 2011* and the *Building Regulations 2012*.

Recommendation 4

The Department of Mines, Industry Regulation and Safety considers the introduction of requirements for property managers and private landlords to provide, in the most cost-effective way and resulting in the least regulatory burden, a copy of the most recent inspection form confirming that the swimming pool barrier was found to be compliant, to the potential tenant at the time of entering into a lease agreement.

4.5.2 Three of the 34 children who died by drowning were recorded as having underlying medical conditions

Seizure disorder, including epilepsy, is a known risk factor for drowning, as follows:

Children with epilepsy are thought to be at increased risk for submersion injury. In population-based studies 2.5% to 7.5% of submersion victims and 2.5% to 4.6% of drowning victims had a preexisting seizure disorder. Based on those percentages, the risk of submersion injury among children with epilepsy is hypothesized to be roughly four times that of children without epilepsy. Several

¹⁴⁰ Department of Housing and Public Works, Queensland, *Guidelines for pool owners and property agents*, October 2016, p. 12.

descriptive studies have reported that most drownings among children with epilepsy occur in the bathtub, and relatively few deaths occur while swimming.¹⁴¹

The research literature also notes that '[t]here is some evidence from studies with small numbers of patients that children with autism spectrum disorders are at higher risk of drowning than those in the general population.'¹⁴² The National Autism Society in America notes in a fact sheet that '[d]rowning is among the leading causes of death of individuals with autism'¹⁴³ and includes a link offering 'special needs swimming lessons.'¹⁴⁴

The Office found that, of the 34 children who died by drowning three children were recorded as having been diagnosed with epilepsy and, or, autism spectrum disorder.

4.5.3 One of the 34 children who died by drowning was recorded as having consumed alcohol and drugs prior to the fatal drowning incident

The research literature suggests that alcohol consumption is a risk factor for adolescent drowning, as follows:

Drowning has significantly contributed to unintentional injury deaths for young adult males in Australia, with non-fatal drowning incidents resulting in high rates of injury hospitalisation. Combining alcohol, risky behaviour and aquatic activity has often resulted in serious injuries and death, as borne out by past analysis which indicates 30-50% of adolescent drowning deaths ... involved alcohol consumption.¹⁴⁵

The Office found that the records identified that one of the 34 children who died by drowning, who was aged 17 years, had consumed alcohol and other drugs prior to the fatal drowning incident.

¹⁴¹ Diekema, D, Quan, L, Holt, V, 'Epilepsy as a Risk Factor for Submersion Injury in Children', *Pediatrics*, vol 91, No 3, March 1993, p. 612.

¹⁴² Weiss, J, & the Committee on Injury, Violence, and Poison Prevention, 'Technical Report, Prevention of Drowning', *Pediatrics*, Vol 126, 1 July 2010, pp. e253-e262.

¹⁴³ National Autism Association United States of America, *Autism & Safety Facts*, viewed 16 June 2016, <<http://nationalautismassociation.org/resrouces/autism-safety-facts/>>.

¹⁴⁴ United States of America National Autism Association, *Autism & Safety Facts*, viewed 16 June 2016, <<http://nationalautismassociation.org/resrouces/autism-safety-facts/>>.

¹⁴⁵ The Australian Water Safety Council, *The Australian Water Safe Strategy 2012-15*, Sydney, 2012, p. 16, viewed 19 January 2015, citing research by Howland et al, 'Alcohol as a risk factor for drowning and other aquatic injuries' in Watson R (ed) *Alcohol, Cocaine and Accidents, Drug and Alcohol Abuse Reviews*, 17, Totowa, Humana Press Inc, pp. 85-104.

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5 Private swimming pools in Western Australia

Where location was known, private swimming pools were the most common location of fatal and non-fatal drowning incidents during the six-year investigation period.¹⁴⁶ As discussed in Chapter 4, the Office found that, for 16 (47 per cent) of the 34 children who died by drowning, the fatal drowning incident occurred in a private swimming pool. Similarly, for 170 (66 per cent) of the 258 children who were admitted to a hospital following a non-fatal drowning incident, the incident occurred in a swimming pool. Accordingly, the Ombudsman determined to examine private swimming pools in Western Australia in more detail.

5.1 Number of private swimming pools

The Office was unable to identify any source with recent information about the total number and location of private swimming pools in Western Australia, therefore, as part of the Investigation, the Office collected and analysed this information.

The Office surveyed local governments regarding the number of private swimming pools in their local government district as at 30 June 2015 (**the local government survey**). Of the 140 local governments that were surveyed,¹⁴⁷ 138 (99 per cent) local governments responded to the survey (**the 138 survey respondents**) and two (one per cent) local governments did not respond to the survey. The two local governments that did not respond were small local governments located outside the metropolitan regions of Western Australia.

Section 130 of the *Building Act 2011* requires local governments to keep building records associated with private swimming pools (such as applications for building permits and inspections) located in their local government district to enable monitoring of compliance with Part 8, Division 2 of the *Building Regulations 2012*. This requirement is discussed in more detail in Chapters 6 and 9.

Of the 138 survey respondents:

- one hundred and thirty five local governments provided information about the number of private swimming pools in their district; and
- three local governments responded that they did not know the number of private swimming pools in their district.

As at 30 June 2015, the 138 survey respondents reported that they had recorded a total of 144,899 private swimming pools. The number of private swimming pools recorded (**recorded private swimming pools**) by each local government is provided at Appendix 1.

¹⁴⁶ As identified at section 3.3.1, in this report, the term **private swimming pool** is used to refer to a private swimming pool and a private spa.

¹⁴⁷ At the time of the Investigation, there were 138 local governments in Western Australia and two local governments located in the Commonwealth territories of Christmas Island and Cocos (Keeling) Islands that were also included in the survey. The Shire of Narrogin and the Town of Narrogin have merged to form a new and expanded Shire of Narrogin which took effect as of 1 July 2016.

5.2 Geographical distribution of recorded private swimming pools

The Office analysed the information about recorded private swimming pools provided by local governments, by region, applying the categorisation of 'Metropolitan' and 'Other regions' defined in Schedules 3, 4 and 5 of the *Planning and Development Act 2005*. In this Chapter and throughout this report, those regions defined as 'Other regions' in Schedule 4 of the *Planning and Development Act 2005* are also referred to as **non-metropolitan regions** and include the Gascoyne Region, Goldfields-Esperance Region, Great Southern Region, Kimberley Region, Mid-West Region, Peel Region, Pilbara Region, South West Region and Wheatbelt Region. The Office has separately identified Christmas Island and the Cocos (Keeling) Islands (and in this report, these islands are referred to as **the Christmas/Cocos (Keeling) Islands**).

The Office found that, of the 144,899 private swimming pools recorded by the 138 survey respondents:

- 119,633 private swimming pools (83 per cent) were recorded by the 30 metropolitan local governments; and
- 25,266 private swimming pools (17 per cent) were recorded by the 108 non-metropolitan local governments.

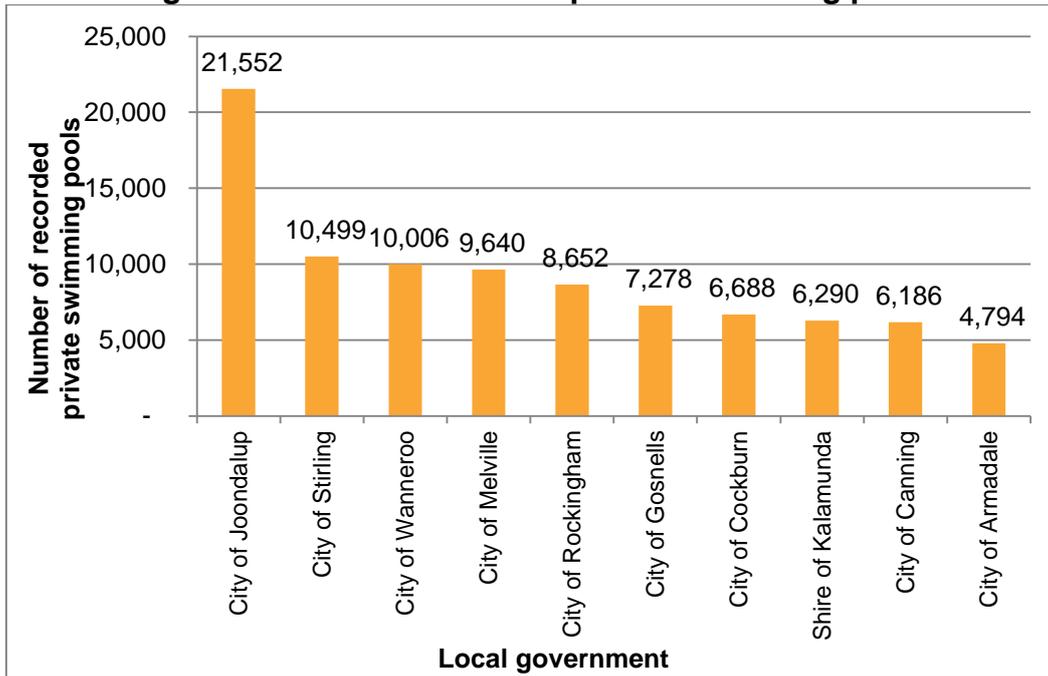
Further details are provided in Figure 32 and Figure 33.

For comparison, in Western Australia, as at 30 June 2015, 75 per cent of the population lived in metropolitan local government districts and 25 per cent lived in non-metropolitan local government districts.¹⁴⁸

Figure 32 shows the 10 metropolitan local governments that reported the highest numbers of recorded private swimming pools. Of particular note, the City of Joondalup recorded twice as many private swimming pools as the local government district with the second highest number of recorded private swimming pools (City of Stirling).

¹⁴⁸ Derived by the Office from the Western Australian Local Government Association, *The Western Australian Local Government Directory 2016*, Western Australian Local Government Association, West Leederville, 2016.

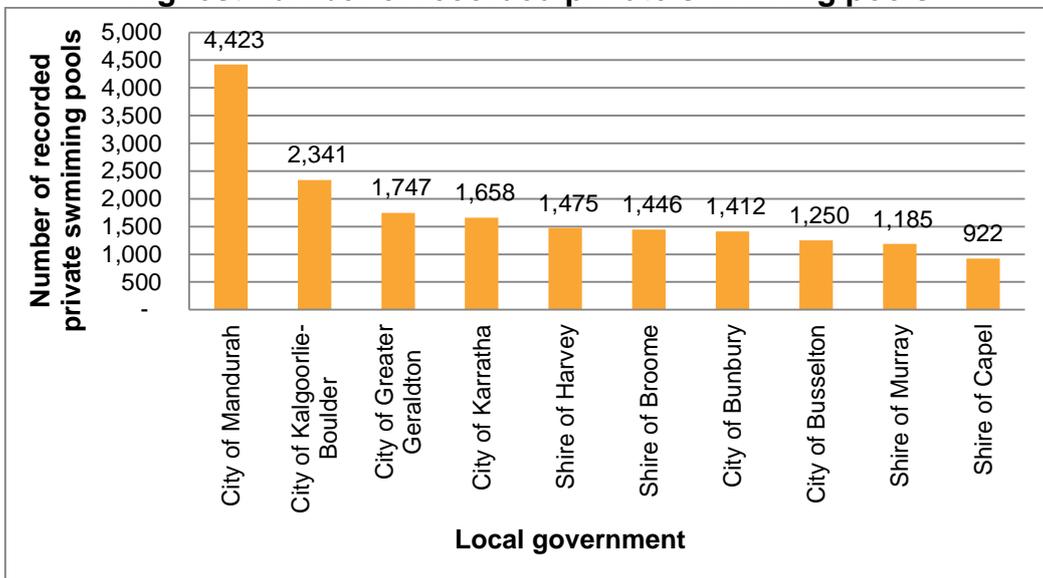
Figure 32: Metropolitan local governments that reported the highest number of recorded private swimming pools



Source: Ombudsman Western Australia

Figure 33 shows the 10 non-metropolitan local governments that reported the highest number of recorded private swimming pools.

Figure 33: Non-metropolitan local governments that reported the highest number of recorded private swimming pools

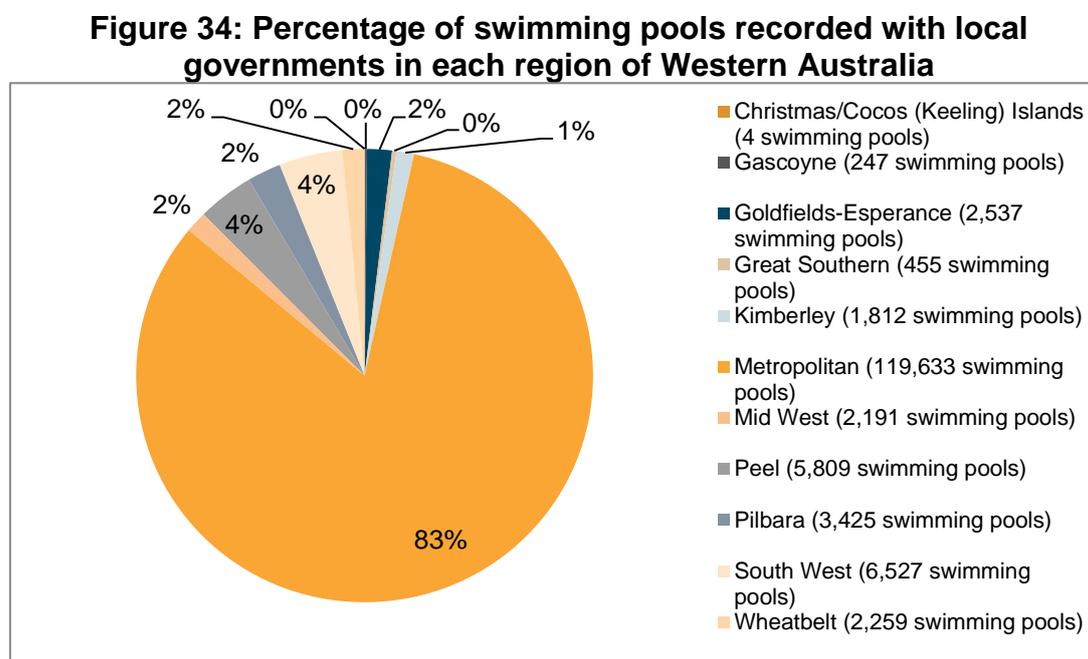


Source: Ombudsman Western Australia

Of the 108 non-metropolitan local governments, 35 reported having fewer than 10 recorded private swimming pools, with 11 of these local governments reporting that they had no recorded private swimming pools within their district.

5.3 Density of recorded private swimming pools

The Office analysed the percentage and number of private swimming pools by region. The Office's findings are shown in Figure 34 below.



Source: Ombudsman Western Australia

The Office found that the number of people per recorded private swimming pool in each region ranged from:

- one private swimming pool per 16.1 people in the metropolitan region; to
- one private swimming pool per 132.2 people in the Great Southern region; to
- one private swimming pool per 518.0 people in the Christmas/Cocos (Keeling) Islands (Figure 35).

The number of dwellings per recorded private swimming pool in each region also ranged from:

- one private swimming pool per 6.0 dwellings in the Pilbara region; to
- one private swimming pool per 62.1 dwellings in the Great Southern region; to
- one private swimming pool per 221.5 dwellings in the Christmas/Cocos (Keeling) Islands (Figure 35).

Figure 35: Number of people, dwellings and area, per recorded private swimming pool, by region

Regions	Number of people per recorded private swimming pool	Number of dwellings per recorded private swimming pool	Area (square kilometre) per recorded private swimming pool
Christmas/Cocos (Keeling) Islands	518.0	221.5	37.3
Gascoyne	43.4	17.4	529.8
Goldfields-Esperance	24.1	10.1	307.0
Great Southern	132.2	62.1	89.9
Kimberley	19.8	9.5	242.1
Metropolitan	16.1	6.2	<0.01
Mid-West	26.6	11.3	218.7
Peel	18.2	8.3	0.8
Pilbara	19.9	6.0	147.3
South West	26.0	11.4	3.7
Wheatbelt	33.0	17.6	149.6

Source: Ombudsman Western Australia and Western Australian Local Government Association¹⁴⁹

5.4 Fatal and non-fatal drowning incidents in each local government district

The Office analysed deaths by drowning, admission to a hospital, and attendance at an emergency department at a hospital using the number of recorded private swimming pools located in each local government district and the population of children residing in each local government district.

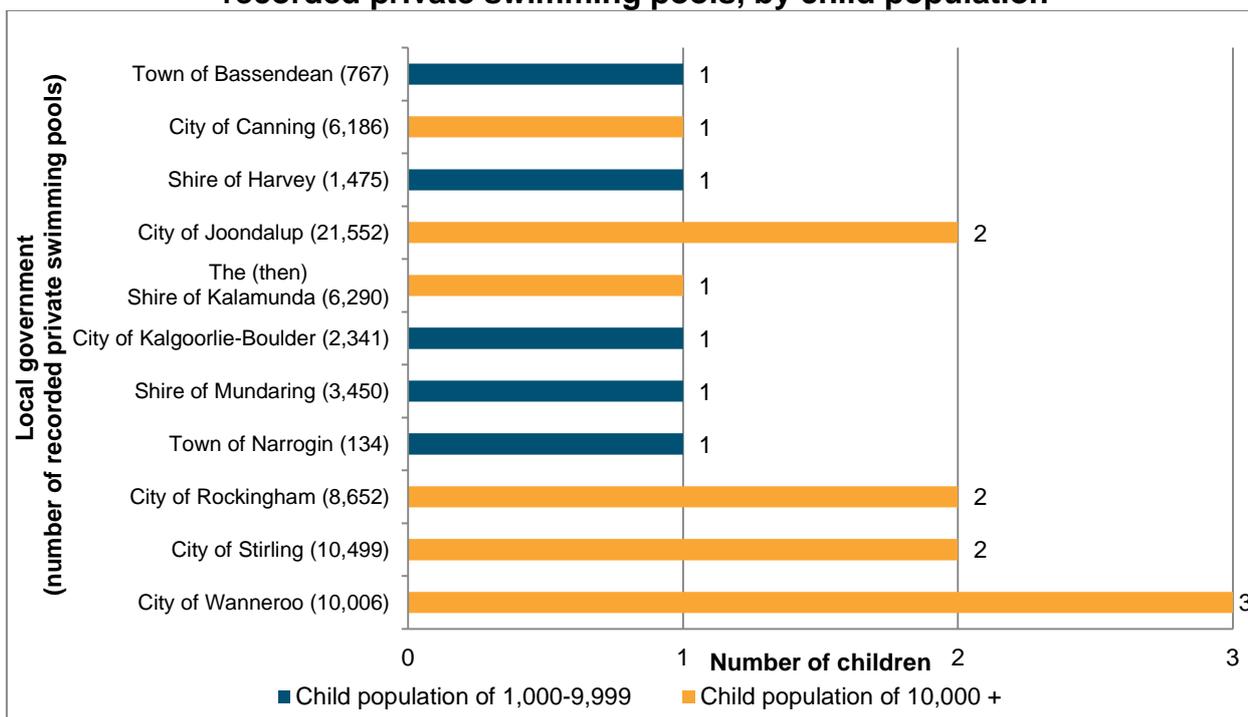
In considering the analysis set out below, it is important to note that the results are descriptive in nature only; the Office has not made any finding that any of the local government districts named could have prevented any of the recorded drowning incidents and there is no implication to be drawn from the presentation of descriptive analysis below that they could have done so.

5.4.1 Number of children who died by drowning in a private swimming pool, by number of recorded private swimming pools and child population in each local government district

The Office found that 16 of the 34 children who died by drowning did so following an incident in a private swimming pool. The Office analysed the number of children who died by drowning following an incident in a private swimming pool by the local government district of the child's residence and the local government district of the location of the fatal drowning incident. This analysis also considered the number of recorded private swimming pools located in each local government district and the population of children residing in each local government district. The Office's findings are set out in Figure 36.

¹⁴⁹ Western Australian Local Government Association, *The Western Australian Local Government Directory 2016*, Western Australian Local Government Association, West Leederville, 2016.

Figure 36: Number of children who died by drowning in a private swimming pool, by local government of the location of the fatal drowning incident and number of recorded private swimming pools, by child population



Source: Ombudsman Western Australia

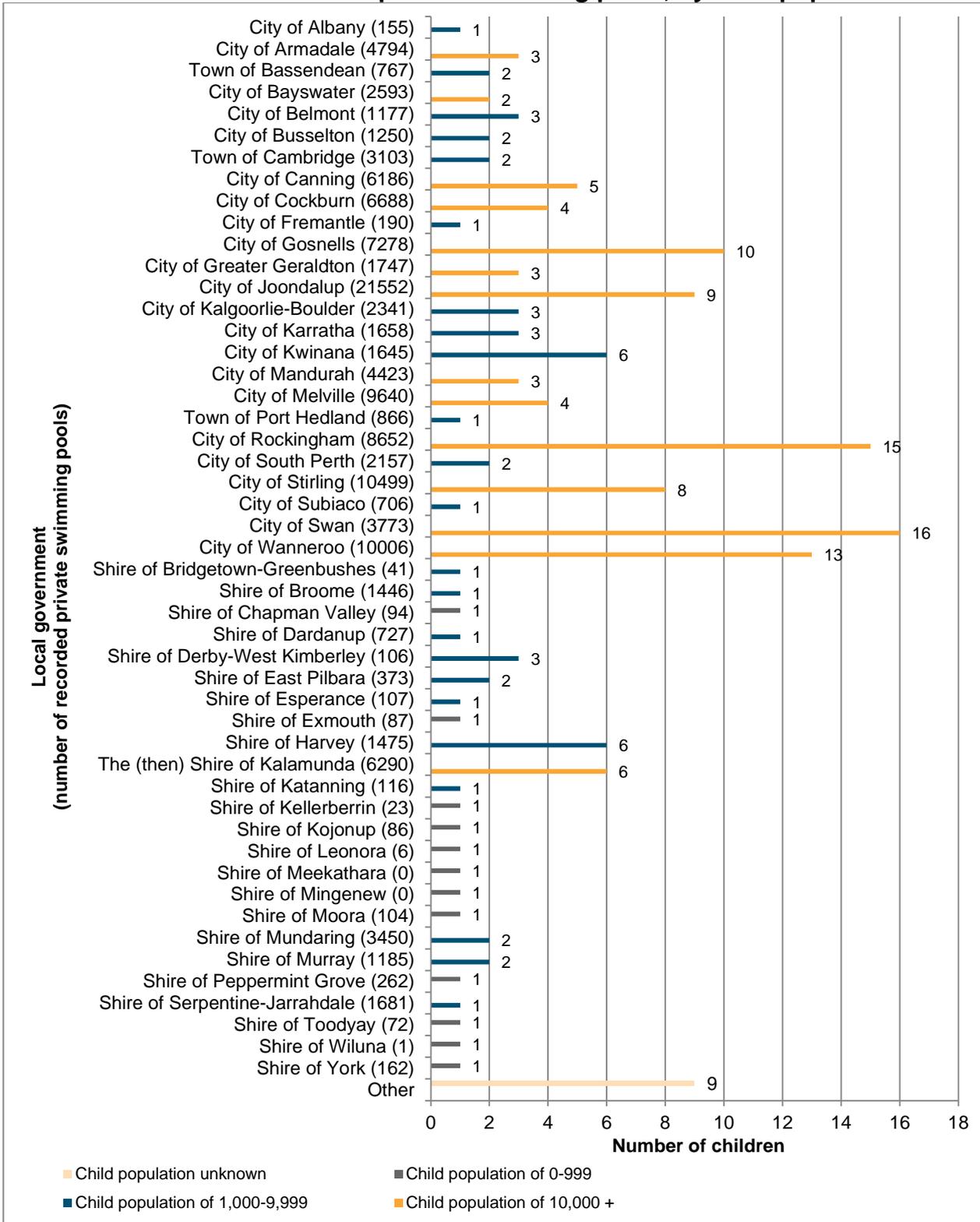
5.4.2 Number of children who were admitted to a hospital following a non-fatal drowning incident in a swimming pool, by number of recorded private swimming pools and child population in each local government district

The Office found that, of the 258 children who were admitted to a hospital following a non-fatal drowning incident, 170 (66 per cent) were admitted following an incident in a swimming pool.¹⁵⁰

The Office analysed the number of children who were admitted to a hospital following a non-fatal drowning incident in a swimming pool by the local government district of the child's residence (for these children, information regarding the location of the non-fatal drowning incident was unavailable). This analysis also considered the number of recorded private swimming pools located in each local government district and the population of children residing in each local government district. The Office's findings are set out in Figure 37.

¹⁵⁰ WA Health did not routinely record if a swimming pool was a private or public swimming pool.

Figure 37: Number of children admitted to a hospital following a non-fatal drowning incident in a swimming pool, by local government of child’s residence and number of recorded private swimming pools, by child population



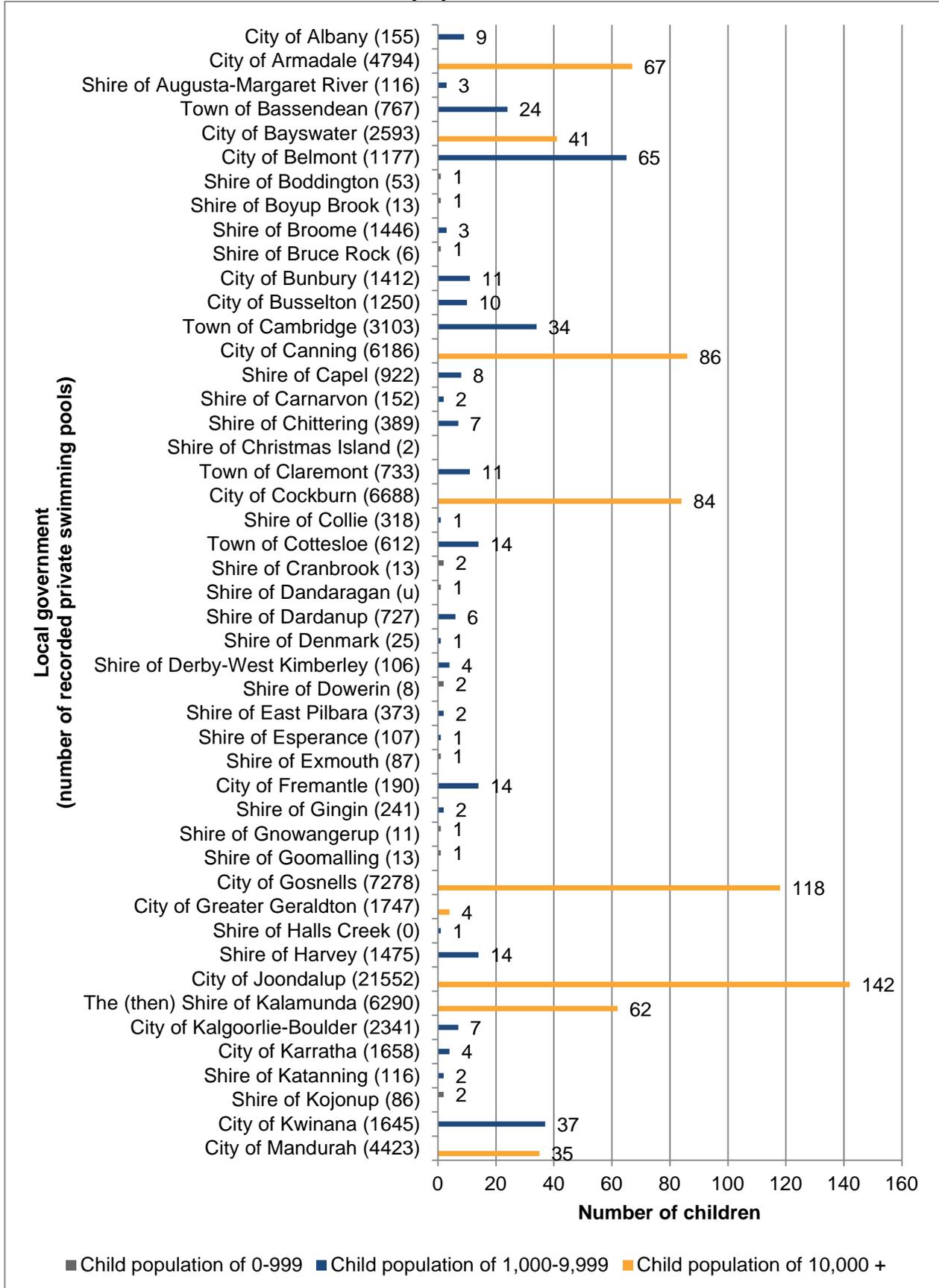
Source: Ombudsman Western Australia

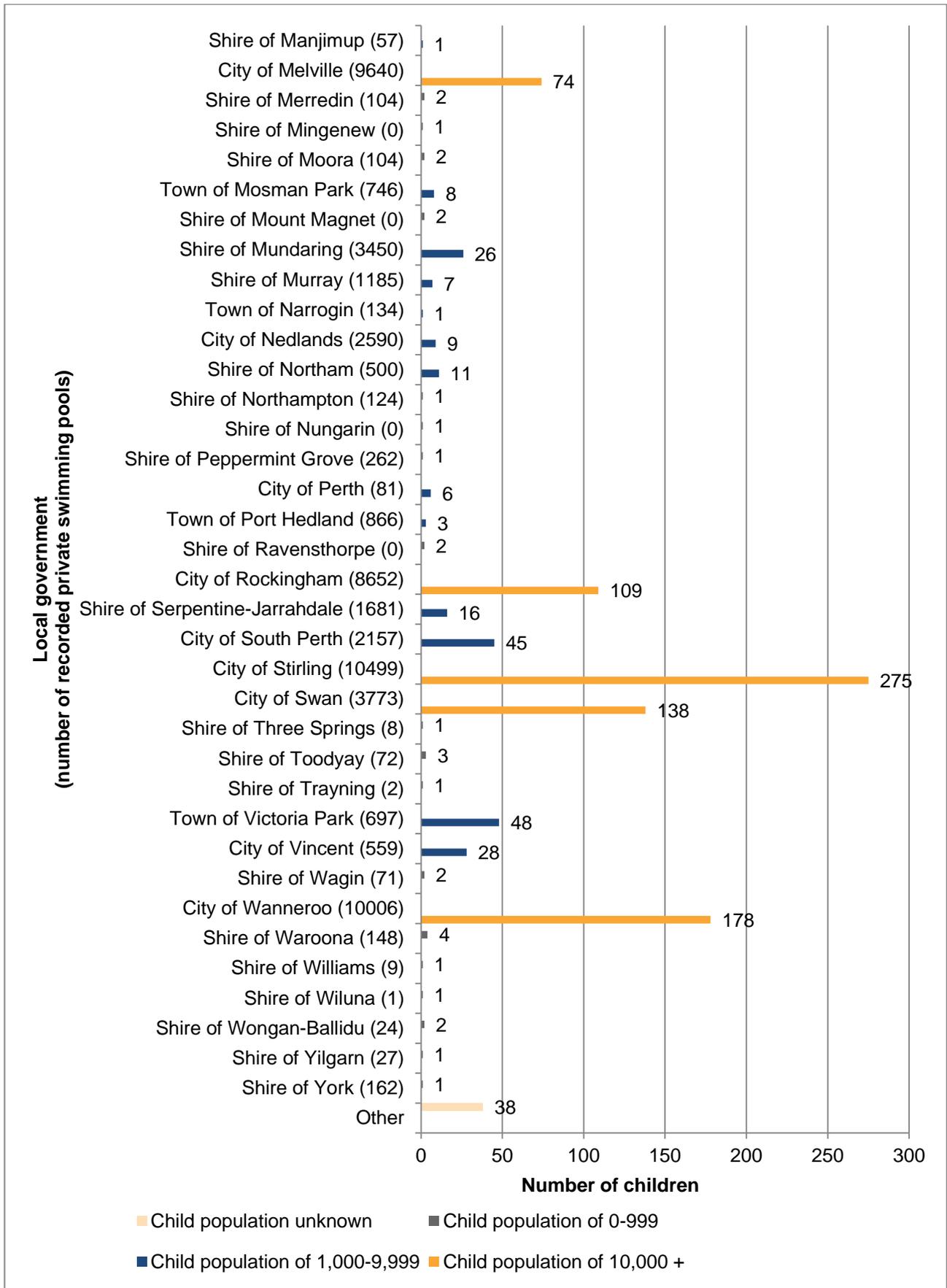
Note: ‘Other’ includes nine children who did not reside in Western Australia or for whom the local government district of the child’s residence could not be determined.

5.4.3 Number of children who attended an emergency department at a hospital following a non-fatal drowning incident in all locations, by local government of the child's residence

The Office found that 2,310 children attended an emergency department at a hospital following a non-fatal drowning incident in all locations. For these children, information regarding the location of the non-fatal drowning incident was unavailable. However, for completeness, the Office analysed the number of children who attended an emergency department at a hospital following a non-fatal drowning incident in all locations by the local government district of the child's residence. This analysis also considered the number of recorded private swimming pools located in each local government district and the population of children residing in each local government district. The Office's findings are set out in Figure 38.

Figure 38: Number of children who attended an emergency department at a hospital following a non-fatal drowning incident in all locations, by local government of child's residence and number of recorded private swimming pools, by child population





Source: Ombudsman Western Australia

Note: 'Other' includes 38 children who did not reside in Western Australia or the local government district of the child's residence could not be determined.

6 Inspection of private swimming pool barriers by local governments in Western Australia

As discussed in Chapter 3, regulation 3 of the *Building Regulations 2012* defines a private swimming pool as follows:

private swimming pool means a swimming pool —

- (a) that is associated with —
 - (i) a Class 1a building; or
 - (ii) less than 30 sole-occupancy units in a Class 2 building; or
 - (iii) a Class 4 part of a building;and
- (b) which has the capacity to contain water that is more than 300 mm deep;

The Building Code of Australia defines the classes of buildings referred to in regulation 3 of the *Building Regulations 2012* as follows:

...

Class 1a – a single dwelling being-

- (i) a detached house; or
- (ii) one of a group of two or more attached dwellings, each being a building, separated by a fire-resisting wall, including a row house, terrace house, town house or villa unit; or

...

Class 2: A building containing 2 or more sole-occupancy units each being a separate dwelling.

...

Class 4: a dwelling in a building that is Class 5 [an office building], 6 [a shop or other building for the sale of goods by retail or the supply of services direct to the public], 7 [a car park or for storage or display of goods or produce for sale by wholesale], 8 [a laboratory or a building involved in the production, repair or cleaning of goods], or 9 [public building] if it is the only dwelling in the building.¹⁵¹

In this report, the term **private swimming pool** is used to refer to a private swimming pool and a private spa. Where it is not known whether the swimming pool/spa is a private swimming pool/spa or is not a private swimming pool/spa, or this distinction is not relevant, the term **swimming pool** is used.

As also discussed in Chapter 3, the Office found that, for 16 (47 per cent) of the 34 children who died by drowning, the fatal drowning incident occurred in a private swimming pool. Similarly, for 170 (66 per cent) of the 258 children who were admitted to a

¹⁵¹ Australian Building Codes Board, National Construction Code 2016: *Volume One Building Code of Australia, Class 2 to Class 9 Buildings*, February 2016, pp. 37.

hospital following a non-fatal drowning incident, the incident occurred in either a private or public swimming pool.

Data regarding the location of the non-fatal drowning incident was not available for the children who attended an emergency department at a hospital. However, using the percentage of children who were admitted to a hospital (66 per cent), the Office estimated that, for 1,525 children of the 2,310 children who attended an emergency department at a hospital following a non-fatal drowning incident, the location of the incident may have been a private or public swimming pool.

The research literature suggests that supervision is a key element in the layers of protection against drowning, as follows:

The existing literature on child drowning often cites a lapse in, or lack of, supervision as a contributing factor. Our findings confirm that this is also the case in Australia, with supervision a contributor in almost three-quarters of unintentional child drownings (71.7%).¹⁵²

Lapses in supervision were discussed in detail in Chapter 4. Where a lapse in supervision occurs, a barrier (such as a fence) to a swimming pool provides an additional layer of protection against drowning, as follows:

... evidence from other studies found that pool fencing that adequately prevents children reaching the pool unsupervised can prevent about three-quarters of all child drownings in pools.

...

Pool fencing is a passive environmental intervention, designed to reduce unintended access to swimming pools and thus prevent drowning in the preschool age group.¹⁵³

Recognising the importance of swimming pool barriers in the prevention of drowning, the Western Australian Parliament enacted the relevant provisions of the *Building Act 2011* (which includes provisions for the *Building Regulations 2012*).¹⁵⁴ The regulatory framework in relation to barriers around private swimming pools¹⁵⁵ establishes requirements for both individuals and local governments, including that:

¹⁵² Petrass, L, Blitvich, J, Finch, C. Lack of caregiver supervision: a contributing factor in Australian unintentional child drowning deaths, 2000-2009, *The Medical Journal of Australia*, 2011, 194 (5) p. 230.

¹⁵³ Thompson, D and Rivara, F, *Pool fencing for preventing drowning of children*, Cochrane Database of Systematic Reviews, 1998, Issue 1, pp. 1-2.

¹⁵⁴ The *Building Act 2011* provided for the amendment of the *Local Government (Miscellaneous Provisions) Act 1960* and various other Acts of relevance to swimming pools and their barriers. The legislative requirements for public swimming pools differ from private swimming pools and are not investigated in this report.

¹⁵⁵ The legislative requirements for public swimming pools differ from private swimming pools and are not investigated in this report.

- each owner and occupier of premises on which there is a private swimming pool must ensure that a barrier is installed or provided;¹⁵⁶
- swimming pool barriers must comply with the requirements specified in the *Building Regulations 2012*;
- local governments are informed of the existence of a private swimming pool through applications for building permits to construct it and through the submission of notices of completion;¹⁵⁷ and
- local governments must arrange for an authorised person to inspect the swimming pool barrier at intervals of no more than four years.¹⁵⁸

These requirements are discussed in detail below.

6.1 Each owner and occupier of premises on which there is a private swimming pool must ensure that a barrier is installed or provided

6.1.1 Legislative requirements

Regulation 50(1)¹⁵⁹ of the *Building Regulations 2012* requires owners and occupiers of premises on which there is a private swimming pool to ensure that a barrier is installed or provided around the private swimming pool (a **swimming pool barrier**), as follows:

50. Barrier to private swimming pool

- (1) Each owner and occupier of premises on which there is a private swimming pool containing water that is more than 300 mm deep must ensure that there is installed or provided around the pool a barrier that restricts access by young children to the pool and its immediate surrounds.

Penalty for this subregulation: a fine of \$5 000.

Regulation 50(1) was amended by the *Building Amendment Regulations (No 2) 2016*, which came into operation on 1 May 2016. At the time of the Investigation, regulation 50(1) provided:

50. Enclosure of private swimming pool

- (1) Each owner and occupier of premises on which there is a private swimming pool containing water that is more than 300 mm deep must ensure that there is installed or provided around the pool an enclosure

¹⁵⁶ This obligation only applies to owners and occupiers in certain local government districts and areas, as listed in the Table in Schedule 5 of the *Building Regulations 2012* (regulation 49). The application of this obligation is discussed in detail in section 9.4 of this report.

¹⁵⁷ This obligation only applies to certain areas and to certain kinds of building work as set out in Schedule 4 of the *Building Regulations 2012* (regulation 41).

¹⁵⁸ This obligation only applies in certain local government districts and areas as listed in the Table in Schedule 5 of the *Building Regulations 2012* (regulation 49). The application of this obligation is discussed in detail in section 9.4 of this report.

¹⁵⁹ This obligation only applies to owners and occupiers in certain local government districts and areas as listed in the Table in Schedule 5 of the *Building Regulations 2012* (regulation 49). The application of this obligation is discussed in detail in section 9.4 of this report.

that restricts access by young children to the pool and its immediate surrounds.

Penalty: a fine of \$5 000.

That is, the effect of the amendment was to replace 'an enclosure' with 'a barrier' to a private swimming pool. To avoid confusion and for consistency, throughout this report, the term 'barrier' is used.

6.2 Swimming pool barriers must comply with the requirements specified in the *Building Regulations 2012*

6.2.1 Legislative requirements

Regulation 50 of the *Building Regulations 2012* goes on to set out the circumstances in which a swimming pool barrier is considered to be suitable for restricting access by young children to the pool and its immediate surrounds. This includes requirements to comply with an applicable Building Code pool barrier requirement (for private swimming pools constructed after May 2016) and to comply with the requirements of AS 1926.1-1993 (for private swimming pools constructed before May 2016), as follows:

50. Barrier to private swimming pool

...

- (1A) A barrier to a private swimming pool is to be taken to be suitable for the purposes of subregulation (1) if —
 - (a) it complies with a Building Code pool barrier requirement that was in effect —
 - (i) if a building permit applies to the construction of the pool — at the time the application for a building permit to construct the pool was made; or
 - (ii) otherwise — at the time the construction of the pool commenced; or
 - (b) the swimming pool is a pre-May 2016 private swimming pool and the barrier satisfies the requirements in paragraph (a) or complies with subregulations (2) to (5).
- (1B) For the purposes of subregulation (1A)(a), a performance solution cannot be used to comply with a Building Code pool barrier requirement unless the performance solution is an approved barrier solution.
- (2) The immediate surrounds of a pre-May 2016 private swimming pool that is at the rear of premises may include any part of the rear portion of the premises.
- (3) If a building other than a Class 10 building is included within the barrier to a pre-May 2016 private swimming pool all external doors and windows in that building must satisfy the requirements of AS 1926.1.

- (4) A barrier to a pre-May 2016 private swimming pool —
 - (a) may consist of a fence, wall, gate or other component, or a combination of them; and
 - (b) any fence, wall, gate or other component that is included in the barrier must be in accordance with —
 - (i) the requirements of AS 1926.1; or
 - (ii) approved alternative requirements; and
 - (c) any wall comprising part of the barrier must have no means of access through a building other than —
 - (i) a window that is in accordance with the requirements of AS 1926.1; or
 - (ii) an approved door.
- (5) If a boundary fence of the premises is a part of the barrier to a pre-May 2016 private swimming pool, the boundary fence satisfies the requirements of clauses 2.3, 2.6 and 2.7 of AS 1926.1 if all those requirements are satisfied in relation to either side of the fence.

The different requirements for pre-May 2016 and post-May 2016 private swimming pools reflect the *Building Amendment Regulations (No 2) 2016*, which came into operation on 1 May 2016. These amendments resulted in the adoption of the swimming pool barrier requirements of the Building Code of Australia. The (then) Department of Commerce summarised the effect of the amendments as follows:

The Amendment Regulations will:

- adopt the safety barrier requirements of the Building Code of Australia (BCA), and thus the 2012 edition of AS 1926.1 (Safety barriers for swimming pools) and 2007 edition of AS 1926.2 (Location of safety barriers for swimming pools) incorporating amendments nos 1 & 2, for new private swimming pools from 1 May 2016;
- allow existing private swimming pools to continue to comply with their existing requirements;
- optionally, allow existing private swimming pools to comply with the new requirements; and
- maintain the requirement that alternative solutions to a private swimming pool safety barrier must be approved by the relevant permit authority.

Once the Amendment Regulations come into effect, Western Australia will no longer have any variations to the BCA [Building Code Australia].¹⁶⁰

At the time that information was collected for the Investigation, which was prior to 1 May 2016, AS 1926.1-1993 applied rather than the Building Code pool barrier

¹⁶⁰ Government of Western Australia, Department of Commerce, *Building Amendment Regulations (No. 2) 2016 (swimming pool barriers)*, Industry Bulletin 067/2016, viewed 1 November 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/ib_067_building_amendment_regulations_n_o_2_2016.pdf>.

requirement set out immediately above. Accordingly, the Office has examined local governments' inspections of swimming pool barriers against the requirements of AS 1926.1-1993, except where this was not relevant.

6.3 Local governments are to be advised of the existence of a private swimming pool through applications for building permits and notices of completion

6.3.1 Legislative requirements

Section 9 of the *Building Act 2011* provides that building work must not be done without a building permit, including building work for the construction of private swimming pools. Before a private swimming pool can be built '[s]wimming pools and pool safety barriers require a building permit to be issued by the permit authority ... unless otherwise exempt.'¹⁶¹

An application for a building permit for a private swimming pool is usually made to the relevant local government (as the permit authority) by the owner of the premises, the swimming pool builder or sometimes a building surveyor (as the applicant). As part of the application process, a registered building surveyor is required to sign a certificate of design compliance stating that the proposed private swimming pool and its barrier will, upon their completion, comply with applicable standards.¹⁶²

This certificate of design compliance may also specify the inspections that should be conducted after the work is completed. Section 19(3) and (4) of the *Building Act 2011* relevantly provide:

19. Certificate of design compliance

...

- (3) A certificate must contain a statement of the building surveyor signing the certificate to the effect that if the building or incidental structure that is the subject of the application is completed in accordance with the plans and specifications that are specified in the certificate, the building (including each incidental structure associated with the building) or incidental structure will comply with each applicable standard.
- (4) A building surveyor may, in a certificate, specify such of the inspections and tests listed in regulations mentioned in section 36(2)(b) that the building surveyor thinks should be conducted during or at the completion of the building work.

¹⁶¹ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 7.

¹⁶² The requirements for swimming pool barriers, which were most recently amended in May 2016, are discussed in detail at section 6.2 of this report.

The local government, as the permit authority, assesses the application for the building permit, including the certificate of design compliance and, if it approves the application, grants the building permit.

Section 25(3)(h) of the *Building Act 2011* requires that the building permit issued by the local government must set out each inspection and test that is to be conducted during or at the completion of the building work, as follows:

25. Form and content of building or demolition permit

...

- (3) A building permit must set out —

...

- (h) each inspection and test that is to be conducted during or at the completion of the building work —
- (i) as specified under section 19(4) in the applicable certificate of design compliance; or
 - (ii) under regulations mentioned in section 36(2)(a);

Section 37(1) of the *Building Act 2011* provides that the person who is named as the builder on the building permit must ensure that, on completion, the building or incidental structure (including a private swimming pool) complies with each applicable building standard, as follows:

37. All buildings to comply with applicable building standards

- (1) The person who is named as the builder on a building permit must ensure, on completion of the building or incidental structure to which the permit applies, that the building or incidental structure complies with each applicable building standard.

Penalty:

- (a) for a first offence, a fine of \$50 000;
- (b) for a second offence, a fine of \$75 000;
- (c) for a third or subsequent offence, a fine of \$100 000 and imprisonment for 12 months.

Section 33 of the *Building Act 2011* requires the responsible person (in relation to the building permit) to provide the local government with a notice of completion, accompanied by a copy of a certificate for each inspection or test that applies to the permit (**an inspection certificate**), within seven days of the completion of the building work, as follows:

33. Notice of completion

...

- (2) The responsible person in relation to a permit must, within 7 days of completion of the work, or the stage of the work, for which the permit was granted, give notice of completion to a relevant permit authority.

Penalty: a fine of \$10 000.

- (3) A notice of completion must —
- (a) be in an approved form; and
 - (b) state that the work, or the stage of the work, for which the permit was granted, is completed; and
 - (c) be accompanied by a copy of a certificate for each inspection or test mentioned in section 25(3)(h) or (4)(f) that applies to the permit.

In this way, local governments are informed that a private swimming pool has been constructed and that the requirements of the *Building Regulations 2012* regarding its barrier and the inspection of its barrier apply.

6.3.2 Guidelines

The new Department of Mines, Industry Regulation and Safety administers the *Building Act 2011* and the *Building Regulations 2012*, primarily through the Building Commissioner and the Building Commission Division. The (then) Department Commerce described the key functions of its Building Commission Division as follows:

Building Commission

- registers or licenses builders, painters, building surveyors, plumbers and construction contracts adjudicators;
- audits and inspects registered building service providers, investigates breaches of legislation and provides a dispute resolution service;
- sets and monitors standards for building and plumbing services;
- develops and provides industry policy and legislation; and
- provides information and advice for industry and consumers.¹⁶³

The Building Commission has developed *Inspector Guidelines: Private swimming and spa pool*¹⁶⁴ (**the Inspector Guidelines**) to provide guidance for all local governments on their inspections of private swimming pool barriers. The *Inspector Guidelines* provide advice to local governments regarding:

- requirements for approving and issuing a building permit;
- requirements regarding notices of completion and inspection certificates;
- requirements for undertaking inspections, including:
 - inspectors as authorised persons;
 - entry to properties, obtaining consent or using assistance and force; and
 - charges to be imposed on owners;
- enforcement measures, including building orders, infringement notices and prosecution; and
- technical details of the applicable standards.

¹⁶³ Government of Western Australia, Department of Commerce, *Annual Report 2014–15*, 2015, viewed 17 August 2016, <www.commerce.wa.gov.au/sites/default/files/atoms/files/ar2014-15_print_friendly.pdf>, p.14.

¹⁶⁴ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>.

With respect to notices of completion, the *Inspector Guidelines* state that a notice of completion, accompanied by an inspection certificate, should be provided to the permit authority, as follows:

At the completion of the work, the person named as builder on the building permit must provide the permit authority with a notice of completion (Building Commission form BA7) (*Building Act 2011* section 33). If the building permit listed the required inspection under regulation 28, this notice must be accompanied by an inspection certificate that confirms whether the safety barriers comply with the Regulations (*Building Act 2011* section 33(2)(c), *Building Regulations 2012* regulations 28 and 29).¹⁶⁵

On 9 November 2016, the Building Commission also published an Industry Bulletin entitled *Notice of completion – inspections and tests*¹⁶⁶ which states:

The responsible person (builder named on the building permit) must give a notice of completion (BA7) in accordance with section 33 of the Act to the permit authority within seven (7) days of completion of the work or stage of work for which the permit was granted. **This establishes the end date of the permit which serves to record relevant compliance matters.**

The notice of completion must be accompanied by a copy of an inspection certificate for each inspection and test that applies to the building permit. It is the responsibility of the builder to organise the inspection certificate.¹⁶⁷ [Emphasis added]

6.3.3 The five selected local governments reported at interview that they estimate that only 30 to 50 per cent of notices of completion for private swimming pools are submitted by builders

During the Investigation, the five selected local governments and other stakeholders reported at interview that, in accordance with the legislative requirements discussed above, local governments require that builders or owners submit a notice of completion accompanied by an inspection certificate certifying that the barrier complies with the *Building Regulations 2012*. However, the five selected local governments estimated that only 30 to 50 per cent of notices of completion and the accompanying inspection certificates are submitted by builders or owners, and that, when they are submitted, this rarely happens within the prescribed seven day timeframe.

¹⁶⁵ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 7.

¹⁶⁶ Government of Western Australia, Department of Commerce, Building Commission, 'Notice of completion – inspections and tests', *Industry Bulletin IB 072/2016*, Department of Commerce, Perth, 2016.

¹⁶⁷ Government of Western Australia, Department of Commerce, Building Commission, 'Notice of completion – inspections and tests', *Industry Bulletin IB 072/2016*, Perth, 2016, p. 1.

6.3.4 The widespread non-compliance reported by the five selected local governments, if accurate, creates the risk that the barriers to private swimming pools will not be inspected on time or at all

Aside from the obvious need for compliance with legislative requirements and regulations, a submission of a notice of completion, and the accompanying inspection certificate, is important for at least two practical reasons. First, it ensures that local governments are provided with evidence that the swimming pool barrier complies with the *Building Regulations 2012* upon installation. Second, it informs the local government that the installation of the swimming pool has been completed and this triggers the commencement of the four yearly inspection period for the barrier.

In relation to this second purpose, in the absence of a notice of completion, the five selected local governments reported at interview that they:

- proactively follow up on outstanding notices of completion by contacting the owners by email or telephone and/or conducting aerial surveying, including checking aerial maps. This can occur within six to 12 months from the granting of the building permit, depending on the local government; or
- rely on neighbours informing the local government that a swimming pool has been installed.

Alternatively, one selected local government reported that they record the swimming pool in the local government's building records at the time that the building permit is issued rather than waiting for the notice of completion.

Notwithstanding these measures, the non-compliance with section 33 of the *Building Act 2011* reported by the five selected local governments, if accurate, creates the risk that the barriers to private swimming pools will not be inspected by the local government on time or at all.

6.3.5 The Building Commissioner has a role to monitor and review the operation of the *Building Act 2011* and to take other steps

The Building Commissioner's functions are set out in section 86 of the *Building Services (Complaint Resolution and Administration) Act 2011* as follows:

86. Functions

The Building Commissioner has the following functions —

- (a) to monitor developments relevant to the regulation of building services in the State;
- (b) to monitor and review the operation of the building service Acts;
- (c) to administer the Building Services Board and the operation of registration and approval schemes under the *Building Services (Registration) Act 2011*;
- (d) to administer the collection of the building services levy under Part 7 Division 2;
- (e) to promote and conduct research and training into building industry policy, building services and other matters that relate to the functions of

- the Building Commissioner;
- (f) to advise the Minister on any matter to which a building service Act relates;
 - (g) to provide information on the registration of registered building service providers or the approval of approved owner-builders;
 - (h) to provide, or facilitate the provision of, advice, information, education and training in relation to —
 - (i) building standards and codes; and
 - (ii) consumer protection in relation to building services;
 - (i) to audit the work and conduct of registered building service providers;
 - (j) to deal with complaints under this Act;
 - (k) to review and identify the causes of complaints and to suggest ways of removing or minimising those causes;
 - (l) to provide advice generally on any matter relating to complaints, and in particular —
 - (i) advice to the public on the making of complaints;
 - (ii) advice to the public on other avenues available for dealing with grievances about building services, registered building service providers or approved owner-builders;
 - (iii) advice about removing or minimising the causes of complaints;
 - (m) to perform any other function conferred on the Building Commissioner by this Act or another written law.

Section 3 of the *Building Services (Complaint Resolution and Administration) Act 2011* provides as follows:

building service Act means any of the following —

- (a) this Act;
- (b) the *Building Act 2011*;
- (c) the *Building Services (Registration) Act 2011*;
- (d) the *Construction Contracts Act 2004*;
- (e) the *Home Building Contracts Act 1991*;
- (f) the *Plumbers Licensing Act 1995* Part 5A;
- (g) the *Local Government (Miscellaneous Provisions) Act 1960* Parts VIII, IX and XV;
- (h) any other enactment prescribed for the purposes of this definition;

Recommendation 5

The Building Commissioner reviews the operation of section 33 of the *Building Act 2011* in order to determine the level of compliance of permit holders (including owners, registered and unregistered builders and swimming pool barrier installers) with requirements to submit notices of completion for private swimming pools and their barriers in accordance with section 33.

Recommendation 6

In undertaking the review of the operation of section 33 of the *Building Act 2011*, the Building Commissioner works cooperatively and collaboratively with local governments to increase compliance by permit holders (including owners, registered and unregistered builders and swimming pool barrier installers) with section 33 of the *Building Act 2011* through a series of the most complementary strategies utilising the expertise and experience of the Building Commissioner and ensuring that such strategies are the most cost-effective and result in the least regulatory burden. At a minimum, consideration should be given to:

- (i) the provision (by either local governments, the Building Commissioner or both) of advice, information, education and training for permit holders regarding the requirements and importance of section 33 of the *Building Act 2011*;
- (ii) the Building Commissioner undertaking risk-based compliance audits of the work and conduct of registered builders of swimming pools;
- (iii) measures which specifically target increased compliance by builders and installers of swimming pool barriers who are not registered builders; and
- (iv) where appropriate in all of the circumstances, use of sanctions by local governments, as provided for by the *Building Act 2011*.

6.4 Local governments must arrange for an authorised person to inspect swimming pool barriers at intervals of no more than four years

6.4.1 The Office's approach to examining local governments' swimming pool barrier inspections

During the Investigation, the Office analysed key aspects of the application of the *Building Act 2011* and the *Building Regulations 2012*¹⁶⁸ by local governments. To do so, for each of the five selected local governments, the Office randomly identified 100 private swimming pools from all private swimming pools whose barriers were due for inspection from 1 July 2014 to 30 June 2015. The Office then requested certain records relating to the inspection of these swimming pool barriers (**the inspection records**) including:

- the date of the two most recent inspections of each swimming pool barrier (**the inspection history**);
- the outcomes of the most recent inspection;
- if applicable, the reasons for the swimming pool barrier not complying with the *Building Regulations 2012*; and
- the completed inspection form for the most recent inspection of each swimming pool barrier (**the inspection forms**).

In addition, through the local government survey, the Office also requested the following information from all local governments:

- the number of swimming pool barriers inspected, and the number of inspections conducted, by the local government from 1 July 2014 to 30 June 2015;
- the number of inspections that were overdue as at 30 June 2015;

¹⁶⁸ The requirements for swimming pool barriers are discussed in detail at section 6.2 of this report.

- the number of infringements issued and prosecutions commenced by the local government from 1 July 2014 to 30 June 2015; and
- charges made for inspections as at 30 June 2015.

Using the inspection records and information collected through the local government survey, the Office analysed the number and timeliness of inspections undertaken by local governments, the outcomes of inspections, the re-inspection of swimming pool barriers, local governments' enforcement of the *Building Regulations 2012*, and charges made for inspections. The Office's findings are discussed in detail below.

6.5 Number and timeliness of swimming pool barrier inspections

6.5.1 Legislative requirements

The responsibility for installing or providing a swimming pool barrier that meets the legislative requirements rests with '[e]ach owner and occupier of premises on which there is a private swimming pool containing water that is more than 300 mm deep' (regulation 50(1) of the *Building Regulations 2012*).

Regulation 53(1) of the *Building Regulations 2012*¹⁶⁹ requires local governments to arrange for an authorised person to inspect the barrier¹⁷⁰ to a private swimming pool 'at intervals of no more than 4 years', to ensure compliance with regulation 50, as follows:

53. Inspection of barrier to private swimming pool

- (1) The local government for the district in which a private swimming pool containing water that is more than 300 mm deep is located must arrange for an authorised person to inspect the barrier to the private swimming pool at intervals of no more than 4 years for the purpose of monitoring whether the provisions in regulations 50 and 52¹⁷¹ are being complied with.

Local governments are required to arrange for the inspection of swimming pool barriers that are located in a local government district specified in Schedule 5 of the *Building Regulations 2012*, as follows:

¹⁶⁹ Amendments to the *Building Regulations 2012* took effect from 1 May 2016.

¹⁷⁰ Regulation 53(1) was amended by the *Building Amendment Regulations (No 2) 2016*, which came into operation on 1 May 2016. The effect of the amendment was to replace 'pool enclosure' with 'barrier to a private swimming pool'. To avoid confusion, and for consistency, throughout this report, the Office has used the term 'barrier.'

¹⁷¹ Regulation 52 sets out the concessions for pre-November 2001 private swimming pools.

49. Application of this Division

This Division applies in respect of a private swimming pool that is located in a local government district specified in column 1 of the Table in Schedule 5 in the area specified for that district in column 2 of that Table.

The application of this Division, such that some swimming pool barriers are exempt from inspection, is discussed in more detail at section 9.4.

6.5.2 Guidelines

The *Inspector Guidelines* state that local governments are required to conduct an inspection of all private swimming pools (and their barriers) at intervals not exceeding four years, as follows:

The Regulations require each local government to cause all private swimming pools in non-exempt areas (Building Regulations 2012 regulation 49) to be inspected at intervals not exceeding four years (Building Regulations 2012 regulation 53(1)). The purpose of this inspection is to monitor whether legislation, codes, and standards, are being complied with in regards to the pool safety barriers.

Swimming pools that are not located in a local government district specified in Building Regulations 2012 – column 1 of the Table in Schedule 5, in the area specified for that district in column 2 of that Table, do not require a four yearly inspection ...¹⁷²

6.5.3 From 1 July 2014 to 30 June 2015, 51,736 inspections of swimming pool barriers were conducted for 41,692 private swimming pools by 77 local governments

In the local government survey, the Office requested information about the number of inspections conducted from 1 July 2014 to 30 June 2015. The Office found that, of the 138 survey respondents:

- 86 (62 per cent) local governments reported that they undertook inspections from 1 July 2014 to 30 June 2015:
 - 77 (56 per cent) local governments reported that they had conducted a total of 51,736 inspections from 1 July 2014 to 30 June 2015; and
 - nine local governments reported that they had undertaken inspections of an identified number of swimming pools but did not know the total number of inspections conducted in the period;
- 39 (28 per cent) local governments reported that they had conducted no inspections from 1 July 2014 to 30 June 2015;

¹⁷² Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 7.

- 11 (8 per cent) local governments reported that they did not have any swimming pools within their district; and
- two (1 per cent) local governments were unable to provide information about whether they had undertaken any inspections from 1 July 2014 to 30 June 2015.

In the local government survey, the Office also requested information about the number of swimming pools for which local governments had inspected the barrier between 1 July 2014 and 30 June 2015. The 86 local governments that reported that they had undertaken inspections between 1 July 2014 and 30 June 2015 reported that there were 140,510 swimming pools located in their districts (representing 97 per cent of the 144,899 swimming pools recorded across Western Australia). These 86 local governments reported that they had inspected the barriers of 41,692¹⁷³ swimming pools. This represents 29 per cent of the 144,899 swimming pools recorded across Western Australia. This percentage of inspections undertaken in one year indicates that, if continued over four years and across local governments, the barriers for all recorded swimming pools in Western Australia would be inspected in accordance with regulation 53(1) of the *Building Regulations 2012*.

The Office found that 39 of the 127 (31 per cent) local governments with swimming pools recorded as being located within their district had not conducted any inspections from 1 July 2014 to 30 June 2015. The Office reviewed the comments provided by the 138 survey respondents regarding possible reasons for this. The Office found that local governments arranged and conducted inspections of swimming pools using two approaches:

- (i) local governments with large numbers of swimming pools arranged and conducted inspections throughout a four year period; and
- (ii) local governments with fewer swimming pools arranged and conducted inspections at a single point in time within a four year period.

The second approach identified above is a possible reason why some local governments did not undertake any inspections during the survey period. This was supported by the Office's further analysis of the survey data, which identified that, of the 39 local governments that reported that they had conducted no inspections of swimming pool barriers from 1 July 2014 to 30 June 2015, 35 (90 per cent) had less than 100 swimming pools recorded as being located in their district.

¹⁷³ Swimming pool barriers may be inspected on more than one occasion, therefore this number is not the same as the total number of inspections undertaken. The re-inspection of swimming pool barriers is discussed in detail at section 6.7.

6.5.4 Four of the five selected local governments had inspected between 12 per cent and 54 per cent of swimming pool barriers due for inspection; records at one local government were not sufficient to allow for this to be determined

A child's voice¹⁷⁴

A child was visiting an adult's house. The child was able to access the swimming pool because of a defective gate latch. The child was found face down in the swimming pool, unresponsive. Resuscitation was commenced, but the child could not be revived.

The swimming pool had been due for an inspection by the local government before the drowning occurred, however this inspection had not yet occurred. The barrier of the pool, including the gate latch, had been found to be compliant at previous inspections. However, after the drowning occurred, the local government undertook an inspection of the barrier and identified the gate latch was not compliant, along with other compliance issues.

The Office requested a list from the five selected local governments of all private swimming pools that were due for an inspection from 1 July 2014 to 30 June 2015.¹⁷⁵ From these lists, at each of the five selected local governments, the Office randomly identified 100 swimming pools. The Office collected the swimming pool inspection records of each of the 500 swimming pools including, where available:

- records of the most recent inspection and records of previous inspections; and
- associated inspection forms.

The Office then analysed the available inspection records to determine if the local government had undertaken an inspection of the swimming pool and whether the most recent inspection was undertaken within four years of the previous inspection. As summarised in Figure 39, the Office found that:

- City of Canning - all 100 selected swimming pool barriers were inspected or visited at some time. Eight (eight per cent) were barriers to new swimming pools and the inspection form recorded their first inspection. Of the remaining 92 swimming pool barriers:
 - 11 (12 per cent) were inspected within four years of the previous inspection;

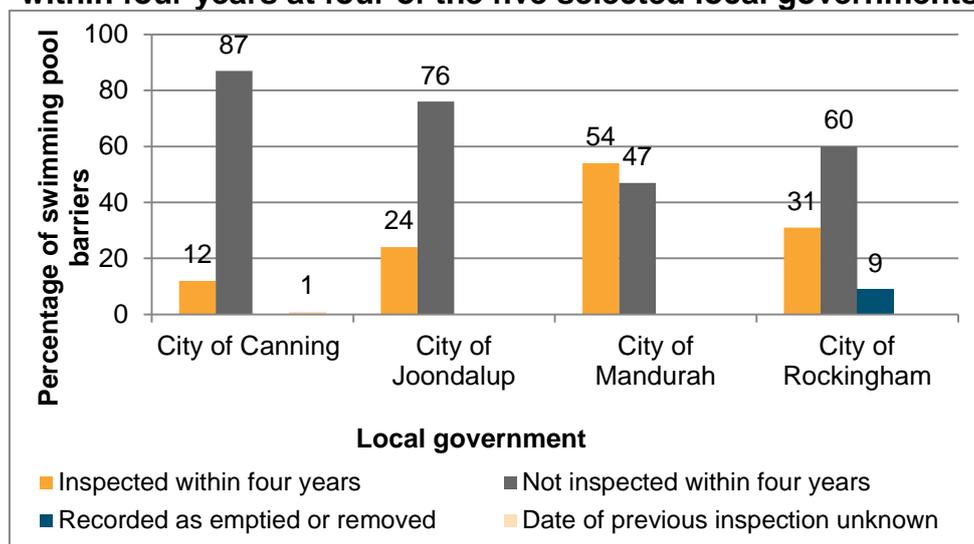
¹⁷⁴ This case study is drawn from deaths notified to the Ombudsman's office. Each child's death is tragic and the Office endeavours to ensure that every child can be given a voice in its investigations. In doing so, the Office wishes to show respect to the child that has died and the child's family, as well as represent the child's voice in a way that may assist in preventing other child deaths. As part of this respect it is critical that names and other identifying information have been removed or changed.

¹⁷⁵ The Office identified that the five selected local governments had a total of 43,406 (30 per cent) of the total swimming pools in Western Australia).

- 80 (87 per cent) had not been inspected within four years of the previous inspection; and
- one (one per cent) was inspected but the date of inspection was not available (as it had been overwritten by the date of a newly installed swimming pool).
- City of Joondalup - all 100 selected swimming pool barriers were inspected at some time. Seven (seven per cent) were barriers to new swimming pools and the inspection form recorded their first inspection. Of the remaining 93 swimming pool barriers:
 - 22 (24 per cent) were inspected within four years of the previous inspection; and
 - 71 (76 per cent) were not inspected within four years of the previous inspection.
- City of Mandurah - all 100 selected swimming pool barriers were inspected at some time. Twenty nine (29 per cent) were barriers to new swimming pools and the inspection form recorded their first inspection. Of the remaining 71 swimming pool barriers:
 - 38 (54 per cent) were inspected within four years of the previous inspection; and
 - 33 (46 per cent) were not inspected within four years of the previous inspection.
- City of Rockingham - 99 of the 100 selected swimming pools were inspected or visited at some time. Of these 99 swimming pool barriers:
 - 31 (31 per cent) were inspected within four years of the previous inspection;
 - nine (9 per cent) had been visited within four years of a previous inspection and the swimming pool was found to be emptied or removed, and accordingly the inspection did not proceed; and
 - 59 (60 per cent) were not inspected within four years of the previous inspection.
- City of Bayswater - could not provide a list of swimming pool barriers that were due for inspection between 1 July 2014 and 30 June 2015. At the time of the Investigation, the City of Bayswater maintained a list of swimming pools with a field to record the date of the 'last or due inspection'. That is, once an inspection was undertaken, the City of Bayswater recorded the date the inspection was undertaken over the top of the date that the inspection was due. The Office randomly selected 100 swimming pools that the City of Bayswater had recorded as having barriers that were 'last or due inspection' between 1 July 2014 and 30 June 2015. The Office found that, of these 100 swimming pools, 86 swimming pool barriers had been inspected. However, as the City of Bayswater had overwritten the date that the inspection was due (if the inspection had been undertaken), and the City did not separately record the date of the previous inspection, the Office could not determine whether these 86 inspections had been undertaken within four years of the previous inspection.

In summary, the Office found that none of the five selected local governments recorded that they had inspected all swimming pool barriers at intervals of no more than four years, in accordance with regulation 53(1) of the *Building Regulations 2012*. Where records were available, four of the five selected local governments had inspected between 12 per cent and 54 per cent of swimming pool barriers due for inspection at intervals of no more than four years.

Figure 39: Percentage of swimming pool barriers inspected within four years at four of the five selected local governments



Source: Ombudsman Western Australia

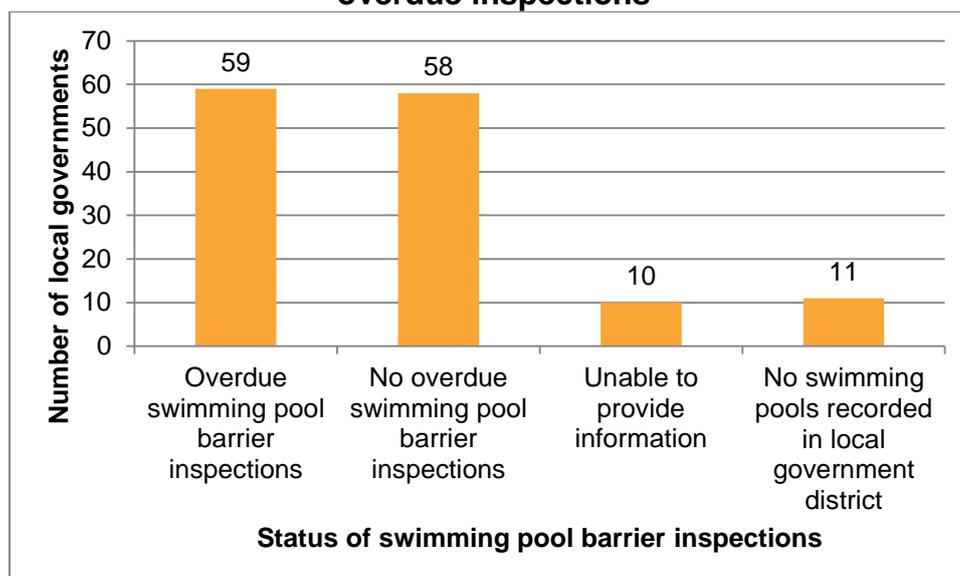
Note: Percentages do not add to 100 due to rounding.

Since the Investigation was concluded, all five selected local governments reported that they have taken steps to ensure that all swimming pool barriers that were due for inspection have been inspected.

6.5.5 Forty-three per cent of the 138 survey respondents self-reported having overdue inspections at 30 June 2015, with the percentage of overdue inspections ranging up to 100 per cent

In the local government survey, the Office requested information about the total number of swimming pool barriers that were overdue for inspection (that is, more than four years had elapsed since the previous inspection). The Office found that 59 local governments reported that there were a total of 8,639 swimming pools that were overdue for inspection at 30 June 2015. Of the 138 survey respondents:

- 59 (43 per cent) local governments reported having overdue inspections at 30 June 2015;
- 58 (42 per cent) local governments reported having no overdue inspections at 30 June 2015;
- 10 (7 per cent) local governments did not know the number of overdue inspections at 30 June 2015; and
- 11 (8 per cent) local governments reported having no swimming pools within their district (Figure 40).

Figure 40: Number of local governments that self-reported having overdue inspections

Source: Ombudsman Western Australia

The Office further analysed the local government survey responses to determine the regions in which local governments with overdue inspections were located and the percentage of overdue inspections within local governments. To undertake this analysis, the Office applied the categorisation of 'Metropolitan' and 'Other regions' defined in Schedules 3, 4 and 5 of the *Planning and Development Act 2005*. As identified in Chapter 5 of this report, those regions defined as 'Other regions' in Schedule 4 of the *Planning and Development Act 2005* are referred to as 'non-metropolitan' regions in this report.

The Office found that, of the 30 metropolitan local governments:

- 14 (47 per cent) local governments reported having overdue inspections at 30 June 2015;
- 13 (43 per cent) local governments reported having no overdue inspections at 30 June 2015; and
- three (10 per cent) local governments reported that they did not know the number of overdue inspections at 30 June 2015 (Figure 41).

In summary, and as shown in Figure 41 below, for the 15 metropolitan local governments with reported overdue inspections at 30 June 2015, the percentage of overdue inspections ranged from 0.1 per cent in the City of Melville to 70.6 per cent in the City of South Perth.

Figure 41: Number and percentage of overdue inspections self-reported by metropolitan local governments

Local government	Number of recorded swimming pools at 30 June 2015	Number of inspections self-reported as overdue at 30 June 2015	Percentage of inspections self-reported as overdue at 30 June 2015
City of Armadale	4,794	23	0.5
City of Canning	6,186	120	1.9
City of Cockburn	6,688	188	2.8
The (then) Shire of Kalamunda ¹⁷⁶	6,290	2,360	37.5
City of Kwinana	1,645	20	1.2
City of Melville	9,640	7	0.1
Town of Mosman Park	746	55	7.4
Shire of Serpentine-Jarrahdale	1,681	562	33.4
City of South Perth	2,157	1,522	70.6
City of Stirling	10,499	34	0.3
City of Subiaco	706	3	0.4
City of Swan	3,773	1,174	31.1
Town of Victoria Park	697	23	3.3
City of Vincent	559	110	19.7

Source: Ombudsman Western Australia

The Office found that, of the 108 non-metropolitan local governments:

- 45 (42 per cent) local governments reported having overdue inspections at 30 June 2015;
- 45 (42 per cent) local governments reported having no overdue inspections at 30 June 2015;
- seven (six per cent) local governments did not know the number of overdue inspections within their district at 30 June 2015; and
- 11 (10 per cent) local governments reported that they had no swimming pools within their district (Figure 42).

In summary, and as shown in Figure 42 below, for the 45 non-metropolitan local governments with reported overdue inspections at 30 June 2015, the percentage ranged from 1.3 per cent in the City of Karratha to 100 per cent in 11 non-metropolitan local governments.

¹⁷⁶ Kalamunda was designated as a City as of 1 July 2017.

Figure 42: Number and percentage of overdue inspections self-reported by non-metropolitan local governments

Local government	Number of recorded swimming pools at 30 June 2015	Number of inspections self-reported as overdue at 30 June 2015	Percentage of inspections self-reported as overdue at 30 June 2015
Shire of Ashburton	528	16	3
Shire of Boyup Brook	13	1	7.7
Shire of Bridgetown-Greenbushes	41	2	4.9
Shire of Broome	1,446	483	33.4
Shire of Broomehill-Tambellup	24	24	100
City of Bunbury	1,412	34	2.4
Shire of Chapman Valley	94	75	79.8
Shire of Cocos (Keeling) Islands	2	2	100
Shire of Collie	318	6	1.9
Shire of Cuballing	28	1	3.6
Shire of Dalwallinu	44	12	27.3
Shire of Denmark	25	6	24
Shire of Derby-West Kimberley	106	80	75.5
Shire of Donnybrook-Balingup	161	15	9.3
Shire of Dundas	6	6	100
Shire of East Pilbara	373	5	1.3
Shire of Gnowangerup	11	11	100
City of Greater Geraldton	1,747	312	17.9
City of Kalgoorlie-Boulder	2,341	437	18.7
City of Karratha	1,658	21	1.3
Shire of Katanning	116	58	50
Shire of Kellerberrin	23	23	100
Shire of Kojonup	86	46	53.5
Shire of Koorda	25	21	84
City of Mandurah	4,423	261	5.9
Shire of Merredin	104	41	39.4
Shire of Moora	104	20	19.2
Shire of Nannup	35	15	42.9
Shire of Narrogin	20	20	100
Shire of Northam	500	61	12.2
Shire of Northampton	124	7	5.6
Shire of Perenjori	6	6	100
Town of Port Hedland	866	48	5.5
Shire of Shark Bay	7	6	85.7
Shire of Three Springs	8	8	100
Shire of Toodyay	72	6	8.3
Shire of Trayning	2	2	100
Shire of Victoria Plains	15	12	80
Shire of Wagin	71	71	100
Shire of Wandering	16	10	62.5
Shire of Waroona	148	38	25.7
Shire of West Arthur	2	1	50
Shire of Williams	9	9	100
Shire of Wyndham-East Kimberley	260	74	28.5
Shire of Yilgarn	27	25	92.6

Source: Ombudsman Western Australia

In summary, the Office found that a significant number of local governments have, or self-reported to have, overdue inspections. Based on the findings of both the Office's analysis of the five selected local governments' inspection records and the local government survey, it is imperative that all local governments review their records to identify swimming pool barriers that are overdue for inspection and undertake these inspections as a matter of priority.¹⁷⁷

As discussed at section 6.5.4, four of the five selected local governments had inspected between 12 per cent and 54 per cent of swimming pool barriers due for inspection; records at one local government were not sufficient to allow for this to be determined. Since the conclusion of the Investigation, all five selected local governments reported that they have taken steps to ensure that all swimming pool barriers that were due for inspection have been inspected. Having done this, it is also critical that all local governments ensure that future inspections of swimming pool barriers are undertaken on a four yearly basis, in compliance with regulation 53(1) of the *Building Regulations 2012*.

Section 86(b) of the *Building Services (Complaint Resolution and Administration) Act 2011* set out at section 6.3.5 provides the Building Commissioner with the powers to 'to monitor and review the operation of the building service Acts', including the *Building Act 2011*. Additionally, section 132 of the *Building Act 2011* provides that:

132. Provision of information to Building Commissioner

- (1) A permit authority must give the Building Commissioner prescribed information for inclusion in the annual report submitted under *the Financial Management Act 2006* Part 5 by the accountable authority, as defined in section 3 of that Act, of the Department as defined in the *Building Services (Complaint Resolution and Administration) Act 2011* section 3.
- (2) The Building Commissioner may, for the purposes of performing the Commissioner's functions under the *Building Services (Complaint Resolution and Administration) Act 2011*, request a permit authority to provide to the Commissioner —
 - (a) a record kept by the permit authority under section 130; or
 - (b) other information of a prescribed kind that is relevant to the functions of the permit authority under this Act or the functions of the Commissioner.

¹⁷⁷For example, and very pleasingly, the City of Greater Geraldton informed the Office of the following: "Since 30 June 2015 the City has reduced the number of overdue pool inspections from 312 to zero by having a dedicated team to achieving this end.", City of Greater Geraldton, personal communication, 11 October 2017.

- (3) A permit authority that is a special permit authority or a local government must provide a record or information requested under subsection (2) to the Building Commissioner in the prescribed manner.
- (4) Information to be given under this section must be given in a format approved by the Building Commissioner.

Regulation 14 of the *Building Regulations* provides that:

14. Provision of information to Building Commissioner (s. 132)

- (1) For the purposes of section 132(1) a permit authority must give the Building Commissioner the following information, in respect of the period covered by an annual report —
 - (a) the number of building permits, demolition permits and occupancy permits granted by the permit authority;
 - (b) the number of building approval certificates granted by the permit authority;
 - (c) the total estimated value of building work for which building permits were granted by the permit authority;
 - (d) the number of building orders made by the permit authority;
 - (e) the number of prosecutions for an offence against the Act commenced by the permit authority;
 - (f) the number and outcome of prosecutions commenced by the permit authority that have been finalised in the period.
- (2) For the purposes of section 132(3) information requested under section 132(2) must be provided to the Building Commissioner electronically.

Recommendation 7

The Building Commissioner monitors local governments' compliance with regulation 53(1) of the *Building Regulations 2012*, including by requiring that local governments report on compliance with regulation 53(1) each year, and that the Building Commission reports this information to Parliament in its annual report.

6.5.5.1 *Sound record keeping systems are necessary to ensure local governments compliance with the Building Regulations 2012*

In undertaking fieldwork with the five selected local governments, the Office observed their record keeping arrangements, which varied from an up to date electronic register of private swimming pools and the inspection history of their barriers, to orderly files of hard copies of inspection forms, to files of inspection forms stored by date, with no link to the owner or address of the swimming pool, impeding access to the inspection history. In addition, in the local government survey, respondents also expressed the view that errors can occur with swimming pools 'dropping off' the local government's records.

Given that regulation 53(1) requires local governments to arrange for inspections of swimming pool barriers 'at intervals of no more than 4 years', it is important that local governments maintain a records management system that will enable them to schedule and monitor these inspections.¹⁷⁸ In this regard, the Office notes that section 128(1) of the *Building Act 2011* provides that local governments must keep a register of all building permits (this includes building permits obtained for swimming pools but may be distinct from the local governments' swimming pool register). Section 128(2) further provides that the register of building permits must be kept in an approved manner and form:

128. Register of permits, building approval certificates, building orders

- (1) A permit authority must keep a register of all building permits, demolition permits, occupancy permits and building approval certificates granted by it, and all building orders made by it.
- (2) The register must be kept in an approved manner and form.

Regulation 4 of the *Building Regulations 2012* provides that the Building Commissioner is a person who may approve the manner and form in which a register is to be kept, pursuant to section 128(2) of the *Building Act 2011* as follows:

¹⁷⁸ Record keeping is provided for, and also regulated by, the *State Records Act 2000*.

4. Approval of manner or form of things (s. 3)

For the purposes of paragraph (a) of the definition of **approved** in section 3 the Building Commissioner is a person who may approve the things set out in the Table.

Table

Section	Description
s. 16(a)	The manner and form of an application for a building permit or a demolition permit
s. 19(2)	The form of a certificate of design compliance
s. 25(1)	The form of a building permit or a demolition permit
s. 33(2)(a)	The form of a notice of completion
s. 34(2)(a)	The form of a notice of cessation
s. 39(8)	The manner and form of an application for a declaration
s. 54(1)(a)	The manner and form of an application for an occupancy permit or a building approval certificate
s. 56(1)	The form of a certificate of construction compliance
s. 57(1)	The form of a certificate of building compliance
s. 61(1)	The form of an occupancy permit or modification or a building approval certificate
s. 65(2)(a)	The manner and form of an application to extend the period of duration of certain occupancy permits or building approval certificates
s. 85(1)(a)	The form of a notice about effect on other land
s. 85(1)(i)	The form of a response notice to accompany a notice about effect on other land
s. 110(2)	The form of a building order
s. 128(2)	The manner and form in which a register is to be kept

In summary, the Office observed variability in the effectiveness of local government record management systems. The key elements in any record management system relating to swimming pools and their barriers should include, but not be limited to:

- the name of the owner;
- the address of the swimming pool;
- the date the swimming pool was submitted for approval and was approved for construction;
- the associated building permit number;
- the date the notice of completion was provided, including the date of the inspection certificate;
- the dates and outcome of any previous inspections; and
- the date the next inspection is due.

A centrally located electronic register, maintained by the Building Commission, could be considered but such an option is likely to be more costly (without sufficient countervailing benefits) than the otherwise less costly option of guidance, instruction and information.

Recommendation 8

The Building Commissioner provides guidance to local governments regarding the manner and form in which the information relating to swimming pools and their barriers should be kept including the key elements of any associated record management system, bearing in mind the need to avoid any inappropriate regulatory burden particularly for small local governments and local governments with few recorded swimming pools in their districts.

6.6 Outcomes of initial inspections of swimming pool barriers

6.6.1 Between eight and 52 per cent of swimming pool barriers inspected by the five selected local governments did not comply with the *Building Regulations 2012* on initial inspection

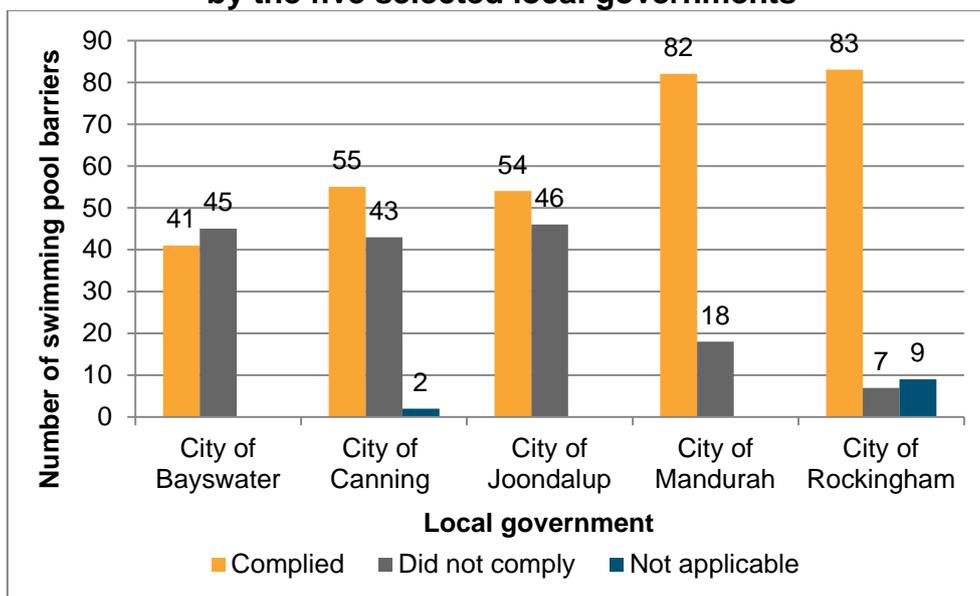
In each four yearly inspection, the local government is required to inspect the barrier to determine if the swimming pool complies with the *Building Regulations 2012* (**initial inspection**). The Office analysed the inspection records of the 500 randomly selected private swimming pools to determine if, on initial inspection, the swimming pool barriers that had been inspected were found to comply with the *Building Regulations 2012*.

The Office found that two of the five selected local governments had not attempted to inspect all 100 swimming pools in the sample. A total of 485 swimming pools had been inspected (or an attempt had been made to inspect the pool - this occurred for eleven swimming pools that were found to be emptied or removed when visited for inspection). Of the total number of 485 swimming pool barrier inspections and visits conducted, a total of 315 (65 per cent) swimming pool barriers were found by local governments to comply with the *Building Regulations 2012*.

On a local government by local government basis, as shown in (Figure 43), the Office found that, where the local government had undertaken an initial inspection or visit (a total of 485 private swimming pool barriers):

- City of Bayswater - of the 86 swimming pool barriers inspected, 41 (48 per cent) were found to comply;
- City of Canning - of the 100 swimming pool barriers inspected, two were barriers to private swimming pools that had been emptied or removed, so the inspection did not proceed further. Of the remaining 98 swimming pool barriers inspected, 55 (56 per cent) were found to comply;
- City of Joondalup - of the 100 swimming pool barriers inspected, 54 (54 per cent) were found to comply;
- City of Mandurah - of the 100 swimming pool barriers inspected, 82 (82 per cent) were found to comply; and
- City of Rockingham - of the 99 swimming pool barriers inspected, nine were barriers to private swimming pools that had been emptied or removed, so the inspection did not proceed further. Of the remaining 90 swimming pool barriers inspected, 83 (92 per cent) were found to comply.

Figure 43: Number of swimming pool barriers found to comply with the *Building Regulations 2012* on initial inspection, by the five selected local governments



Source: Ombudsman Western Australia

In summary, the Office found that, at initial inspection, the number of swimming pool barriers inspected by each of the five selected local governments that were found to comply with the *Building Regulations 2012* ranged from 41 to 83. Between eight and 52 per cent of swimming pool barriers inspected by the five selected local governments did not comply with the *Building Regulations 2012* on initial inspection

The Office also analysed the responses to the local government survey to identify whether this variation in the rate of compliance by swimming pool barriers with the *Building Regulations 2012* among the five selected local governments was consistently reported across Western Australia. Of the 138 survey respondents, 75 survey respondents reported that they had undertaken 37,363 initial inspections between 1 July 2014 and 30 June 2015. Of these 75 local governments, 72 were able to report on how many inspected barriers were found to be compliant at initial inspection. These 72 local governments reported that they had undertaken 26,405 initial inspections and that 13,358 (51 per cent) of these swimming pool barriers were found to comply at this inspection. The median percentage of swimming pools that were found to be compliant at initial inspection across the 72 local governments was 55 per cent.

The Office's findings are consistent with research undertaken by RLSSWA, relating to swimming pools that were inspected between 2004 and 2007. RLSSWA identified that the percentage of Western Australian swimming pool barriers that were found to be compliant at initial inspection at five local governments across a broad cross-section of Western Australia, ranged from 53 per cent to 94 per cent of swimming pool barriers inspected.¹⁷⁹

Strategies for addressing this non-compliance with the *Building Regulations 2012* on initial inspection are discussed in Chapter 8.

¹⁷⁹ Leaversuch, P, and Zic, M, *Home Swimming Pools Barrier Report 2004-2007*, Royal Life Saving Society Australia, Perth, Western Australia, 2008, p. 9.

6.6.2 Problems with gate latches were the most common reason that swimming pool barriers did not comply with the *Building Regulations 2012* on initial inspection

The Office reviewed the 485 inspection records provided by the five selected local governments to determine the reasons why swimming pool barriers were found not to comply with the *Building Regulations 2012* on initial inspection. Of the 485 swimming pool barriers that were inspected and visited for inspection (including where the inspections did not proceed as the swimming pools were found to be emptied or removed):

- 315 (65 per cent) swimming pool barriers were found to comply with the *Building Regulations 2012* on initial inspection;
- 159 (33 per cent) were found to not comply on initial inspection; and
- 11 swimming pools were found to be emptied or removed so the inspection did not proceed further.

As there can be multiple reasons for a barrier not to comply, a total of 315 reasons were recorded by the five selected local governments in relation to the 159 swimming pool barriers that were found not to comply at initial inspection. Figure 44 lists the most common reasons for a barrier being found not to comply as including:

- gates not self-closing or self-latching (67 of 315 instances or 21 per cent);
- windows in houses (where the house wall forms part of a perimeter fence) opening more than 100mm (44 of 315 instances or 14 per cent); and
- doors in houses (where the house wall forms part of a fence) not self-closing or self-latching (44 of 315 instances or 14 per cent).

Figure 44: Reasons for swimming pool barriers being found not to comply with *Building Regulations 2012* during initial inspections

Reason recorded by the local government	Number of instances this reason recorded
Gate not self-closing/self-latching	67
Window opens >100mm	44
Door not self-closing/self-latching	44
Fence climbable	28
Climbable objects	24
Gap underneath fence/gate >100mm	25
Door latch <1500mm above ground level	15
Gate height/gate latch height <1500mm above ground level	14
Fence height <1500mm above ground level	13
Gate climbable	10
Gate opens/closes incorrectly	8
Incomplete permanent barrier/missing fence panels	7
Skimmer box unsealed	2
Door not permitted	2
Other	12
Total	315

Source: Ombudsman Western Australia

The Office's findings are consistent with the findings of *An Independent Review of Swimming Pool Barrier Requirements for Backyard Swimming Pools in NSW, Discussion Paper, September 2015 (the Independent Review Discussion Paper)*, which identified similar reasons for non-compliance, as follows:

Common factors leading to pools being non-compliant with pool safety requirements include:

- Gates that do not latch or self-close
- Climbable objects within close proximity to the pool barrier
- Excess space under the fence
- Faults with the location or shielding of the gate latch ...¹⁸⁰

6.6.3 One fifth of the reasons that swimming pool barriers did not to comply with the *Building Regulations 2012* on initial inspection related to three-sided barriers

A child's voice¹⁸¹

A child was found floating face up, submerged, in the swimming pool and although immediately pulled from the swimming pool, and cardiopulmonary resuscitation undertaken, the child died.

The swimming pool was installed prior to November 2001. At the time of completion, the swimming pool met Australian Standard AS 1926.1-1993 barrier requirements and a barrier between the house and the swimming pool was not required as the doors and windows from the home were self-closing and self-latching. At the last swimming pool inspection, the local government identified two issues of compliance that needed to be rectified. A re-inspection took place a month later and confirmed that the two issues had been resolved and that, at that time, the pool was found to be compliant.

The self-closing door, although compliant, had trapped an adult's fingers on multiple occasions and, concerned that this would happen to the child, had been disconnected by the adult a few months after the inspection took place to prevent any injury to the child's fingers.

As identified above, a total of 315 reasons were recorded by the five selected local governments in relation to 159 swimming pool barriers that were found not to comply with the *Building Regulations 2012* at initial inspection. The Office identified that 61 of the 315 reasons (19 per cent) for a barrier not to comply were associated with the barrier

¹⁸⁰ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 8.

¹⁸¹ This case study is drawn from deaths notified to the Ombudsman's office. Each child's death is tragic and the Office endeavours to ensure that every child can be given a voice in its investigations. In doing so, the Office wishes to show respect to the child that has died and the child's family, as well as represent the child's voice in a way that may assist in preventing other child deaths. As part of this respect it is critical that names and other identifying information have been removed or changed.

being a 'three-sided barrier' (that is 'there is restricted access via a ... door from the house to the pool'),¹⁸² as follows:

- door not self-closing/self-latching: 44 instances (14 per cent);
- door latch less than 1500mm above ground level: 15 instances (4.7 per cent); and
- door not permitted: two instances (0.6 per cent).

For swimming pools installed before 5 November 2001, compliance with the requirements of regulation 50 of the *Building Regulations 2012* may include a wall that contains a door permitting access through a building, if that door satisfies the requirements of AS 1926.1-1993. That is, for these swimming pools, the swimming pool barrier may consist of a barrier or fence and the sides of the house, if any door satisfies the requirements of AS 1926.1-1993. A barrier constructed in this way is often referred to as a 'three sided barrier'.

This concession is established through regulation 52 of the *Building Regulations 2012*, which provides:

52. Concessions for pre-November 2001 private swimming pools

- (1) This regulation applies to a private swimming pool —
 - (a) installed before 5 November 2001; or
 - (b) installed on or after 5 November 2001 in accordance with plans, drawings and specifications submitted to the local government for approval before that day.
- (2) For the purposes of regulation 50(1), the immediate surrounds of a private swimming pool to which this regulation applies may include any part of the premises on which the pool is located.
- (3) The barrier required by regulation 50 may include a wall that contains a door permitting access through a building if that door satisfies the requirements of AS 1926.1.

This concession for swimming pools installed prior to 5 November 2001 also applied at the time of the Investigation.

As discussed in section 4.2.3, previous Coroner's findings suggest that four-sided barriers are more effective than three-sided barriers in preventing children drowning. Research in Queensland and New South Wales suggests that four-sided swimming pool barriers are more effective than three-sided swimming pool barriers in preventing children drowning as highlighted below.

Queensland research reviewed children aged between one and four years who died in swimming pools and found that the relative risk for children aged between one to four

¹⁸² Barker, R, Spinks, D, Hockey, R, and Pitt, R. *Pool Fencing Legislation in Australia in 2003: The Way Forward*, 2003, p. 2.

years (toddlers) who died by drowning, accessing a swimming pool through a house door than a pool gate was 2.99 times higher, as follows:

... for barriers that failed static compliance, the relative risk of fatal toddler access to the pool via a house door compared to a pool gate was 2.88. Considering compliant and non-compliant barriers together, the relative risk of fatal toddler access to a pool through a house door versus a pool gate was 2.99. This suggests that even when not fully functional, a barrier that separates the house from the pool is more effective at preventing toddler immersion death than a barrier that allows direct toddler access.¹⁸³

The Independent Review Discussion Paper also examined the Queensland research and observed that there was a significantly higher risk of drowning and near drowning with three-sided barriers than four-sided pool barriers, as follows:

The review [2009 Review of the Swimming Pool Act] examined a range of studies that considered the effectiveness of four sided relative to three sided pool barriers. All studies found that there was a significantly higher risk of drownings and near drownings with three sided barriers relative to four sided barriers.¹⁸⁴

However, the Independent Review Discussion Paper suggested that property owners who chose to install a four-sided barrier may also be highly conscientious and therefore undertake the most effective supervision, decreasing the risk of children drowning in swimming pools with four-sided barriers, as follows:

Of course this need not reflect the relative merits of the barriers but could correlate with another factor such as the conscientiousness of the property owner with respect to pool safety. A highly conscientious owner could both select the highest standard pool barriers and undertake the most effective supervision.¹⁸⁵

The Queensland Government conducted a review 'focusing on reducing the number of drownings and serious immersion injuries in swimming pools involving children less than five years of age'¹⁸⁶ in 2008. As a result of this review, in 2010 the Queensland Government implemented a pool safety strategy including amendments to the swimming pool safety laws mostly affecting existing swimming pools, including:

a five-year phase out of child-resistant doors used as pool barriers for existing outdoor pools, or earlier if the property is sold or a lease or other accommodation agreement is entered into prior to 30 November 2015.¹⁸⁷

¹⁸³ Barker, R, Heiring, C, Spinks, D, Pitt, R, 'Domestic Pool Immersions in Queensland Children under 5 years of age'. *Queensland Injury Surveillance Unit Injury Bulletin*, No 104, December 2008, viewed 2 December 2016, <http://www.qisu.org.au/ModCoreFilesUploaded/Bulletin_10486.pdf>, p. 5.

¹⁸⁴ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 8, based on research by Barker et al, Pool fencing legislation in Australia in 2003: *The way forward*, Queensland Injury Surveillance Unit, p. 5.

¹⁸⁵ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 8.

¹⁸⁶ Queensland Government, *Building Industry and Policy, Guidelines for pool owners and property agents*, October 2015, p6.

¹⁸⁷ Queensland Government, *Building Industry and Policy, Guidelines for pool owners and property agents*, October 2015, p6.

In summary, the findings of the Investigation set out in this report, the Coroner's findings, and the research literature all identify that four-sided swimming pool barriers are more effective than three-sided swimming pool barriers in preventing children from drowning. In addition, the Queensland Government has acted to phase out child resistant doors used as swimming pool barriers.

Recommendation 9

Taking into account the findings of the Investigation, the Building Commissioner, subject to consultation, and in development with local governments and industry stakeholders, reviews the concessions for pre-November 2001 swimming pools provided for in regulation 52 of the *Building Regulations 2012*, with a view to considering whether an amendment to the *Building Regulations 2012* ought to be made to remove these concessions. If regulatory changes are made, any such regulatory change should consider an appropriate extended phase-in period to take into account regulatory (sovereign) risk and costs imposed upon existing property owners.

6.7 Re-inspections of swimming pool barriers

6.7.1 Legislative requirements

As previously identified, regulation 53(1) of the *Building Regulations 2012* requires local governments to arrange for an authorised person to inspect the barrier to a private swimming pool at intervals of no more than four years, as follows:

53. Inspection of barrier to private swimming pool

- (1) The local government for the district in which a private swimming pool containing water that is more than 300 mm deep is located must arrange for an authorised person to inspect the barrier to the private swimming pool at intervals of no more than 4 years for the purpose of monitoring whether the provisions in regulations 50¹⁸⁸ and 52¹⁸⁹ are being complied with.

The *Building Regulations 2012* do not require local governments to undertake a re-inspection if a swimming pool barrier does not comply with the *Building Regulations 2012* on initial inspection.

6.7.2 Guidelines

The *Inspector Guidelines* recognise that there is no legislative requirement to undertake re-inspections of swimming pool barriers, stating however that '[i]t is commonplace for the pool inspector to re-inspect a non-compliant safety barrier to ensure compliance has been achieved.'¹⁹⁰

¹⁸⁸ Regulation 50 prescribes the requirement for the installation or provision of a barrier around a private swimming pool.

¹⁸⁹ Regulation 52 sets out the concessions for pre-November 2001 private swimming pools.

¹⁹⁰ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 8.

6.7.3 The five selected local governments re-inspected 81 per cent of the swimming pool barriers that did not comply with the *Building Regulations 2012* on initial inspection and this proved to be an effective tool for increasing compliance

The Office found that, if a swimming pool barrier does not comply with the *Building Regulations 2012* at the time of the initial inspection, the local government may re-inspect the barrier at a later date to determine if the barrier complies (**the first re-inspection**). If the barrier does not comply on the first re-inspection, the local government may undertake a second re-inspection (**the second re-inspection**) and so on, until compliance is achieved or the local government ceases to re-inspect.

The Office analysed the 485 inspection forms obtained from the five selected local governments to determine if barriers that were found not to comply with the *Building Regulations 2012* on initial inspection were subsequently re-inspected. Of the 485 barriers, 159 swimming pool barriers were found not to comply on initial inspection. The Office analysed the inspection records of these 159 swimming pool barriers to determine whether a re-inspection was undertaken. The Office found that 128 of the 159 barriers were re-inspected (81 per cent), as follows:

- City of Bayswater - 24 of the 45 (53 per cent) swimming pool barriers that did not comply on initial inspection were re-inspected at least once;
- City of Canning - all of the 43 (100 per cent) swimming pool barriers that did not comply on initial inspection were re-inspected at least once;
- City of Joondalup - all of the 46 (100 per cent) swimming pool barriers that did not comply on initial inspection were re-inspected at least once;
- City of Mandurah - nine of the 18 (50 per cent) swimming pool barriers that did not comply on initial inspection were re-inspected at least once; and
- City of Rockingham - six of the seven (86 per cent) swimming pool barriers that did not comply on initial inspection were re-inspected at least once.

The Office undertook further analysis to determine whether the re-inspections resulted in compliance with the *Building Regulations 2012*. As shown in Figure 45 below, the City of Canning re-inspected all barriers that did not comply on initial inspection, and compliance was ultimately achieved for all swimming pools that were found not to comply at initial inspection. The other four selected local governments did not achieve compliance for all swimming pool barriers that did not comply at initial inspection, through the re-inspection process. For example, the City of Mandurah re-inspected half of the swimming pools that did not comply on initial inspection, and compliance was achieved for 44 per cent of swimming pools that were found not to comply on initial inspection. Overall, the Office found that the re-inspection process increased the percentage of private swimming pools that ultimately complied with the *Building Regulations 2012*.

Figure 45: Swimming pool barriers inspected and re-inspected, and the outcome of those inspections, by the five selected local governments

City of Bayswater				
	Number of swimming pool barriers inspected or re-inspected	Number of swimming pool barriers that complied at this inspection/ re-inspection	Number of swimming pool barriers that did not comply at this inspection/ re-inspection	Percentage of swimming pool barriers that were non-compliant at this inspection that were re-inspected
Initial inspection	86	41	45	52%
First re-inspection	24	20	4	53%
Second re-inspection	3	3	0	75%
Outcome: 51 per cent of swimming pools found not to comply at initial inspection were found to comply after the second re-inspection				

City of Canning				
	Number of swimming pool barriers inspected or re-inspected	Number of swimming pool barriers that complied at this inspection/ re-inspection	Number of swimming pool barriers that did not comply at this inspection/ re-inspection	Percentage of swimming pool barriers that were non-compliant at this inspection that were re-inspected
Initial inspection	98	55	43	44%
First re-inspection	43	32	11	100%
Second re-inspection	11	11	0	100%
Outcome: 100 per cent of swimming pools found not to comply at initial inspection were found to comply after the second re-inspection				

City of Joondalup				
	Number of swimming pool barriers inspected or re-inspected	Number of swimming pool barriers that complied at this inspection/ re-inspection	Number of swimming pool barriers that did not comply at this inspection/ re-inspection	Percentage of swimming pool barriers that were non-compliant at this inspection that were re-inspected
Initial inspection	100	54	46	46%
First re-inspection	46	30	16	100%
Second re-inspection	16	9	7	100%
Outcome: 85 per cent of swimming pools found not to comply at initial inspection were found to comply after the second re-inspection				

City of Mandurah				
	Number of swimming pool barriers inspected or re-inspected	Number of swimming pool barriers that complied at this inspection/ re-inspection	Number of swimming pool barriers that did not comply at this inspection/ re-inspection	Percentage of swimming pool barriers that were non-compliant at this inspection that were re-inspected
Initial inspection	100	82	18	18%
First re-inspection	9	8	1	50%
Second re-inspection	1	0	0	100%
Outcome: 44 per cent of swimming pools found not to comply at initial inspection were found to comply after the second re-inspection				

City of Rockingham				
	Number of swimming pool barriers inspected or re-inspected	Number of swimming pool barriers that complied at this inspection/ re-inspection	Number of swimming pool barriers that did not comply at this inspection/ re-inspection	Percentage of swimming pool barriers that were non-compliant at this inspection that were re-inspected
Initial inspection	90	83	7	8%
First re-inspection	6	6	0	86%
Second re-inspection	0	0	0	N/A
Outcome: 86 per cent of swimming pools found not to comply at initial inspection were found to comply after the second re-inspection				

Source: Ombudsman Western Australia

6.7.4 Seventy-three per cent of the 138 survey respondents that reported the number of initial inspections they had undertaken, reported that they had also undertaken re-inspections

As discussed at section 6.6.1, of the 138 survey respondents, 75 survey respondents reported that they had undertaken 37,363 initial inspections between 1 July 2014 and 30 June 2015. Of these 75 local governments, 72 local governments were able to report on how many swimming pool barriers were found to be compliant with the *Building Regulations 2012* at initial inspection. These 72 local governments reported that they had undertaken 26,405 initial inspections and that 13,358 (51 per cent) of these swimming pool barriers were found to comply at the initial inspection, and 13,047 swimming pool barriers were found not to comply.

Of the 75 local governments that reported the number of initial inspections undertaken, 55 local governments (73 per cent) reported that they undertook 12,087 first re-inspections. The data suggests that, 93 per cent of swimming pool barriers that were found to be non-compliant at the initial inspection (13,047 barriers) were re-inspected. Fifty-three of these 55 survey respondents reported that they had found a further 6,330 barriers to be compliant after the first re-inspection.

Chapter 8 of this report explores this issue further in the context of enforcement of regulation 50(1) of the *Building Regulations 2012*.

6.8 Inspection fees

6.8.1 Legislative requirements

Regulation 53(2) of the *Building Regulations 2012* enables a local government to fix a charge for the inspection of a private swimming pool barrier, as follows:

53. Inspection of barrier to private swimming pool

...

- (2) A local government may, for a financial year, fix the charge to be imposed on each owner or occupier of land on which there is a private swimming pool containing water that is more than 300 mm deep, to meet the estimated cost in that financial year of carrying out the inspections mentioned in subregulation (1), but the charge fixed —
 - (a) must not exceed the estimated average cost to the local government of carrying out inspections in that year; and
 - (b) must not exceed \$57.45.

The inspection charge is discretionary. That is, a local government may choose to impose the charge or not. However, where the local government decides to exercise its discretion and impose the charge, it must be imposed in accordance with regulation 53(2) of the *Building Regulations 2012*.

6.8.2 Guidelines

The *Inspector Guidelines* state that local governments may charge swimming pool owners annually for inspections as follows:

Local governments are permitted, for a financial year, to fix the charge to be imposed on each owner or occupier of land on which there is a swimming or spa pool, to meet the estimated costs for that financial year of carrying out inspections. The fee charged must not exceed the estimated average cost to the local government of carrying out inspections in that year. The maximum fee that can be charged is \$57.45 (Building Regulations 2012 regulation 53(2)).¹⁹¹

¹⁹¹ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 8.

6.8.3 The Investigation observed uncertainty among some local governments about the charges that they make for swimming pool barrier inspections

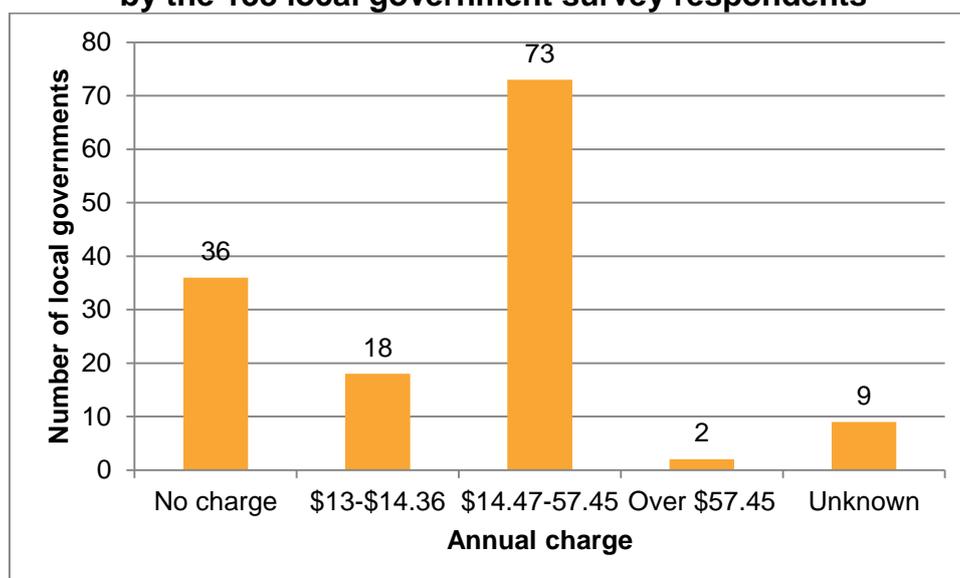
The five selected local governments charged between \$14 and \$33 per annum and described at interview how their different charges reflected the different interpretation by local governments of regulation 53(2) of the *Building Regulations 2012*.

In the local government survey, the Office requested that local governments identify their charges for conducting swimming pool barrier inspections. One hundred and twenty nine local governments provided the Office with an estimate of their charges. The Office found that, of the 138 survey respondents:

- 36 (26 per cent) local governments reported that they did not charge for swimming pool barrier inspections (including 11 local governments that responded in the survey that they did not have any swimming pools within their district);
- 18 (13 per cent) local governments reported that they charged between \$13.00 and \$14.36 per year (that is, a total of up to \$57.44 over a four year period);
- 73 (54 per cent) local governments reported that they charged between \$14.37 and \$57.45 per year;
- two (1 per cent) local governments reported that they charged slightly more than \$57.45 per year;¹⁹² and
- nine (7 per cent) local governments reported that they did not know how much they charged for inspections (Figure 46).

Two of the 138 survey respondents specifically stated that the capped fee does not cover the actual costs of the administration of the inspections process and the on-the-ground inspections, particularly within the smaller local governments.

Figure 46: Charges for swimming pool barrier inspections, by the 138 local government survey respondents



Source: Ombudsman Western Australia

¹⁹² As a result of the Ombudsman's investigation, the local governments that were charging in excess of \$57.45 per year contrary to regulation 53(2) of the *Building Regulations 2012* have now ceased doing so.

Thirty-three of the 36 (92 per cent) local governments that reported that they did not charge for swimming pool barrier inspections either had no swimming pools (11 local governments) or fewer than 100 swimming pools in their district (22 local governments). However, one local government reported that it had over 700 swimming pools within its district but was not charging for swimming pool barrier inspections (of course, the inspection services are not provided for 'free' despite this lack of direct charging and are paid for by all ratepayers through general rates).

This variation in charges may reflect:

- uncertainty with respect to regulation 53(2), particularly whether charges may be imposed only in the year of an inspection, or each year; and/or
- that local governments that are charging significantly less than others are operating on a partial, rather than full cost-recovery basis; and/or
- that certain local governments choose to ensure a 'user pays' system that charges costs by those who cause those costs to be incurred (that is pool owners) while other local governments spread these costs across all ratepayers (regardless of whether they own a pool) through general rates; and/or
- that there are significant differences in the efficiency of swimming pool barrier inspections between local governments and therefore the charges associated with these inspections.

6.8.4 The maximum charge that may be made for a swimming pool barrier inspection has increased by \$7.45 since 1992; local governments reported that the current maximum is insufficient to fund an effective inspection program

The (now repealed) section 245A of the *Local Government (Miscellaneous Provisions) Act 1960*¹⁹³ provided that:

245A. Private swimming pools

...

- (8) A local government may, for a financial year, fix the charge to be imposed on each owner or occupier of land on which there is a swimming pool, to meet the estimated cost in that financial year of carrying out the inspections required by subsection (5)(aa), but the charge fixed —
 - (a) shall not exceed the estimated average cost of carrying out inspections in that year; and
 - (b) shall not exceed the maximum charge, if any, prescribed by regulation.

In 1992, the *Building Amendment Regulation 1992* inserted new regulation 38F¹⁹⁴, which set the maximum inspection charge for the purposes of section 245A(8)(b) of the *Local Government (Miscellaneous Provisions) Act 1960*, as follows:

¹⁹³ Repealed by the *Building Act 2011*, and now incorporated in the *Building Regulations 2012* as regulation 53(2).

38F. Maximum inspection charge

For the purposes of section 245A(8)(b) of the Act, the maximum charge is \$50.

Regulation 38F of the (now repealed) *Building Regulations 1989* was amended by Gazette No. 148 on 28 July 2000 to set the maximum inspection charge as \$55.¹⁹⁵ That is, in 2000, local governments could charge the owner or occupier \$55 annually, if the charge did not exceed the estimated average cost of carrying out inspections in that year.

Regulation 53(2)(b) of the *Building Regulations 2012* currently provides that the charge to be imposed must not exceed \$57.45, as follows:

53. Inspection of barrier to private swimming pool

...

(2) A local government may, for a financial year, fix the charge to be imposed on each owner or occupier of land on which there is a private swimming pool containing water that is more than 300 mm deep, to meet the estimated cost in that financial year of carrying out the inspections mentioned in subregulation (1), but the charge fixed —

(a) must not exceed the estimated average cost to the local government of carrying out inspections in that year; and

(b) must not exceed \$57.45.

In summary, the maximum that local governments may charge annually for a swimming pool barrier inspection has increased by \$7.45 from \$50 in 1992 to \$57.45 in 2016. The Office notes that, if this fee had increased in line with the Consumer Price Index (CPI), the fee would have risen to \$92.70 in 2016.¹⁹⁶ Furthermore, as discussed at section 6.8.3, the Investigation observed uncertainty for some local governments about when charges can be imposed for swimming pool barrier inspections.

Recommendation 10

The Building Commissioner clarifies with local governments the charges that local governments are able to impose for inspections of swimming pool barriers, including whether these charges may be imposed only in the year of an inspection, or each year.

¹⁹⁴ Western Australian Government Gazette No. 88, Perth, 26 June 1992, p. 2760, <[https://www.slp.wa.gov.au/gazette/gazette.nsf/searchgazette/7F6AAF9455642D5DC82572FF001AD80C/\\$file/Gg088.pdf](https://www.slp.wa.gov.au/gazette/gazette.nsf/searchgazette/7F6AAF9455642D5DC82572FF001AD80C/$file/Gg088.pdf)>, accessed 10 July 2017.

¹⁹⁵ Western Australian Government Gazette No. 148, Perth, 28 July 2000, p. 4014 <[https://www.slp.wa.gov.au/gazette/gazette.nsf/gazlist/3CCB72B776848EF648256929001437D8/\\$file/gg148.pdf](https://www.slp.wa.gov.au/gazette/gazette.nsf/gazlist/3CCB72B776848EF648256929001437D8/$file/gg148.pdf)>, accessed 9 May 2017.

¹⁹⁶ Calculated using data from the Australian Bureau of Statistics, *Cat No. 6401.0 Consumer Price Index*, Australia, December 2016.

Recommendation 11

The Building Commissioner consults with local governments regarding the adequacy of charges to meet the cost of swimming pool barrier inspections, including:

- (i) establishing the actual cost of the efficient delivery of swimming pool barrier inspection practices;
- (ii) if appropriate, seeking an amendment to the *Building Regulations 2012* so that the allowed charge reflects this efficient cost; and
- (iii) informing local governments of the efficient cost so that such cost is transparent and borne by the users of the system (that is, ratepayers who have a swimming pool and not cross-subsidised by non-swimming pool owners).

Chapter 8 of this report further discusses the enforcement of regulation 50(1) of the *Building Regulations 2012*.

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7 Quality of inspections

As discussed in Chapter 4, the Office found that, of the 16 children who died by drowning following an incident in a swimming pool, 13 children aged under five years (81 per cent) died following an incident in a swimming pool with either no barrier, a defective barrier or a climbable object near the permanent barrier.

As discussed in Chapter 6, regulation 53(1) of the *Building Regulations 2012* requires local governments to arrange for the inspection of private swimming pool barriers every four years to monitor whether the barriers are compliant with the requirements specified in the *Building Regulations 2012*.

Chapter 6 identified whether local governments had undertaken such inspections in the required time period. This Chapter discusses the quality of local governments' inspections, that is, whether these inspections effectively monitored whether the barriers were compliant with the requirements specified in the *Building Regulations 2012*.

7.1 The Office's approach to examining the quality of local governments' swimming pool barrier inspections

7.1.1 Research literature

The research literature recognises that inspections are one of the most important ways to enforce regulations and ultimately to safeguard health and safety:

Regulatory enforcement is ... a major element in safeguarding health and safety ...inspections are the most visible and important among regulatory enforcement activities.¹⁹⁷

Through its literature review of best practice for regulatory inspections, the Office developed an approach to examining the quality of local governments' inspections of swimming pool barriers. In particular, the Office considered the Organisation for Economic Cooperation and Development's (OECD's) *Regulatory Enforcement and Inspections, OECD Best Practice Principles for Regulatory Policy*¹⁹⁸ (the **OECD Principles**) and the National Association of Testing Authorities (Australia) *ISO/IEC 17020 Inspection Standard Application Document* (the **NATA Inspection Standard**).¹⁹⁹ The literature review identified the following key elements as fundamental to a quality inspection process:

¹⁹⁷ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, OECD Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>, pp 1-69.

¹⁹⁸ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>.

¹⁹⁹ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia.

- the person undertaking the inspection has the appropriate experience and/or qualifications;²⁰⁰
- inspections are undertaken against a sound framework;²⁰¹ and
- adequate records are kept of the inspections.²⁰²

The Office's examination of each of these elements is set out below.

7.2 Experience and qualifications of inspectors

7.2.1 Legislative requirements

The *Building Act 2011* enables local governments to authorise an employee or another person not employed by the local government to inspect swimming pool barriers. Where the authorised person is a local government employee, the legislation does not specify any requirements in relation to their experience or qualifications. However, where the person is **not** an employee of the local government (that is, a contractor), regulation 5A of the *Building Regulations 2012* provides that:

5A. Authorised persons (s. 3)

For the purposes of paragraph (b) of the definition of **authorised person** in section 3 an authorised person includes a person who is authorised by a local government for the purposes of section 93(2)(d) as a **person having the appropriate experience or qualifications**, whether the authorisation is effective before or after the day on which the *Building Amendment Regulations (No. 2) 2012* regulation 4 comes into operation. [Emphasis added]

7.2.2 Guidelines

The *Inspector Guidelines* specify that a pool inspector is required to be an authorised person and that this includes having appropriate experience or qualifications, as follows:

A pool inspector is required to be an authorised person. An authorised person includes a person who is authorised by a local government as having the appropriate experience or qualifications (*Building Act 2011* sections 3, 93(2)(d) and 96, *Building Regulations 2012* regulations 5A and 53(1)).²⁰³

²⁰⁰ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 9.

²⁰¹ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>, p. 12; National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 9.

²⁰² National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 17.

²⁰³ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 7.

The *Inspector Guidelines* do not distinguish between authorised persons who are local government employees and those who are contractors and do not provide any further advice to local governments regarding what constitutes appropriate experience or qualifications of authorised persons.

7.2.3 Research literature

The NATA Inspection Standard states that the competence of inspectors is critical to the validity of inspection findings and identifies requirements regarding the competence of inspectors, as follows:

6.1 Personnel

...

6.1.3

a) The competence of inspectors is critical to the validity of inspection findings. Competence is understood to encompass both theoretical knowledge and practical ability. Depending upon the industry group, competence may demand familiarity with relevant regulations, technologies, processes, standards, codes, materials, failure modes and industry practice. Competent outcomes may also be influenced by the personnel's knowledge of the inspection body's management system and ability to implement administrative as well as technical procedures applicable to the activities performed.

b) Competence requirements apply equally for both employed and contracted personnel.²⁰⁴

7.2.4 Employment of inspectors of swimming pool barriers by local governments

The Office found that, at the time of the Investigation, none of the five selected local governments were engaging contractors to undertake inspections. For this reason, the discussion in this section focuses on the experience and qualifications of local government employees working as inspectors.

Prior to the Investigation, two of the five selected local governments had wholly, or in part, contracted out the inspection function. For completeness, therefore, the Office asked RLSSWA for details of the inspections they undertook on behalf of local governments from 2008 to 2016.

The Office's analysis of the information provided by RLSSWA found that, from 1 January 2008 to 25 November 2016:

- 23 local governments had engaged RLSSWA to undertake inspections of swimming pool barriers; and
- RLSSWA had undertaken 54,407 inspections of swimming pool barriers.

²⁰⁴ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 9.

As at 25 November 2016, three local governments had contracts in place with RLSSWA for inspections.

7.2.5 There is no specified level of experience or specific qualification for inspectors

As previously discussed, there is no legislative requirement for local governments to ensure that local government employees who undertake inspections of swimming pool barriers have the appropriate experience and qualifications (as opposed to people who are not local government employees, that is, contractors).

The NATA Inspection Standard specifies that:

The following matters are required to be addressed:

1. The inspection body must identify the minimum levels of qualification and experience necessary for people to perform relevant tasks.

...

3. The inspection body must develop and implement competency assessment criteria for staff outlining their responsibilities, and the expectations of the inspection body regarding the conduct of work including field activities and interpretation of codes.²⁰⁵

The Office reviewed the job description forms for inspectors at the five selected local governments to identify if they included any requirements with regard to experience and qualifications.

With respect to experience, the Office found that one of the five selected local governments included experience in the swimming pool or pool enclosure industry (for example, experience as a swimming pool installer) as a selection criterion in the job description form and four of the five selected local governments included general experience in compliance inspections including in the planning, building or health fields in the selection criteria. At interview, all five selected local governments reported they sought people who had previous experience in swimming pool inspections, although four of the five selected local governments reported that this was difficult to achieve.

With respect to qualifications, two of the five selected local governments included a generic qualification as a desirable requirement in the selection criteria, for example, a qualification in Building Surveying or relevant field or a Diploma in Legal Studies, a Diploma in Applied Science or a Certificate IV in Government Statutory Investigations and Enforcement. Three of the five selected local governments did not include a qualification as either an essential or desirable requirement in the job description form.

In addition, as the Independent Review Discussion Paper observed, in Western Australia '[t]here are no accreditation requirements for pool inspectors established by the state and it

²⁰⁵ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 10.

is up to individual local authorities to assess the suitability of pool inspectors.²⁰⁶ The Independent Review Discussion Paper also identified that accreditation arrangements, involving training and certification, apply in Queensland and New South Wales.²⁰⁷

7.2.5.1 Local governments reported that the lack of a specific qualification for swimming pool barrier inspections makes it difficult to recruit inspectors with the appropriate skills and experience

One difficulty reportedly arising from the absence of a specific qualification or other training program for swimming pool inspectors was in sourcing inspectors with the necessary skills and experience. All five selected local governments stated at interview that a qualification specific to swimming pool barrier inspections would assist with the recruitment of inspectors. Of particular note, at interview, the City of Bayswater informed the Office that it did not have a dedicated inspector of swimming pool barriers for much of the time from 1 July 2014 to 30 June 2015 due to difficulties in recruiting a suitably skilled and qualified inspector. During this time, the building surveyors at the City of Bayswater undertook swimming pool barrier inspections in addition to their other duties.

Difficulties in sourcing inspectors was also identified by several of the 138 survey respondents from small local governments that stated that providing the inspection service is complex, costly (as discussed in 6.8.3) and challenging, particularly with respect to recruiting appropriately skilled staff. These survey respondents stated that they either operated on 'skeleton staff' or the position of the inspector was not filled by an appropriate candidate.

This sentiment has been echoed by the RLSSA as follows:

Different jurisdictions have different qualification and training requirements for pool fence inspectors. Within jurisdictions there is also variation between qualifications required for certification of new fences and qualifications required for certification of existing fences.

This variation[s] [in qualifications] adds a degree of complexity which frustrates inspection and enforcement. It makes it harder to source qualified inspectors and it makes it more expensive to train inspectors. If one national qualification was accepted for pool fence inspectors then national training programs could be developed and economies of scale would reduce training costs. The pool of qualified inspectors would also be increased for all regulators and qualified staff would be easier to source.²⁰⁸

²⁰⁶ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 23.

²⁰⁷ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, pp 44-48.

²⁰⁸ Royal Life Saving Society Australia, *Position Paper: Nationally consistent regulation of pool barriers*, Royal Life Saving Society Australia, 2007, Broadway, p. 9.

7.2.6 There is no formal training for new inspectors

The OECD Principles identify that inspectors should be trained in the inspection process and managed to ensure consistency and transparency in the inspection process, as follows:

11. Professionalism. Inspectors should be trained and managed to ensure professionalism, integrity, consistency and transparency: this requires substantial training focusing not only on technical but also on generic inspection skills, and official guidelines for inspectors to help ensure consistency and fairness.²⁰⁹

All five selected local governments stated at interview that formal training leading to an inspector qualification specific to swimming pool barrier inspections would improve the quality and consistency of inspections within and between local governments. More specifically, all five selected local governments suggested that a training program with content based on the *Building Regulations 2012* and the principles of building inspections would assist in training new inspectors in the process of undertaking swimming pool barrier inspections. Similarly, one of the 138 survey respondents suggested that a specific training course for inspectors could be adopted throughout the state to ensure an adequate standard and consistency of inspections.

As discussed at section 6.3.5, section 86(h)(i) of the *Building Services (Complaint Resolution and Administration) Act 2011* relevantly provides:

86. Functions

The Building Commissioner has the following functions —

...

- (h) to provide, or facilitate the provision of, advice, information education and training in relation to —
 - (i) building standards and codes; and
 - (ii) consumer protection in relation to building services;

Taking into account the importance placed on training in the research literature, and by local governments and RLSSWA, as discussed above, a training program specifically for inspectors should be considered.

²⁰⁹ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>, p. 14.

Recommendation 12

The Building Commissioner, in consultation with local governments and other stakeholders, considers whether it would be appropriate to co-ordinate the development and provision of a training program (including curriculum, scheduling arrangements, modes of delivery and assessment methods) specifically for inspectors of swimming pool barriers. In doing so, the Building Commissioner can take into account matters relevant to the expertise and experience of the Building Commissioner, but should at a minimum consider:

- (i) the cost of the program including developing and delivering the program at least cost to taxpayers. For example, the Building Commission could consider funding such training from the Department of Mines, Industry Regulation and Safety's internal training fund. Such funding would not require new funding and potentially represents a cost-beneficial way of contributing to enhanced inspection standards and enhanced protection for Western Australian children and ultimately the reduction of risk of child death by drowning;
- (ii) any unintended consequences of establishing the training program, including if establishing the program could act to restrict the supply of inspectors and thus exacerbate the difficulties in recruiting inspectors; and
- (iii) if the training program can and should be linked to the national training system.

7.2.6.1 Compliance promotion and conflict resolution skills are essential skills for undertaking swimming pool barrier inspections

The OECD Principles state:

A competency framework for inspectors would encompass not only technical skills (of course fundamental – ensuring that inspectors' specific knowledge remains current throughout their career), but just as importantly generic skills relating to their work as inspectors. This should include the understanding and analysis of risk, approaches to compliance promotion (communication, relationship-building, how to handle infringements), etc.

...

Conflict management skills are also important for them to handle often complex situations with businesses.²¹⁰

The Office analysed whether inspectors were recruited with specific knowledge and skills in compliance promotion and conflict resolution. At interview, all five selected local governments stated that they looked for people with good communication skills to employ as inspectors. The ability to negotiate and resolve conflicts was considered to be of particular importance as inspectors are required to negotiate with people to ensure the barrier to their swimming pool complies with the legislation. All five selected local governments' job description forms for inspectors included good customer service skills, communication skills and conflict resolution skills as essential requirements. The five selected local governments identified that specific training in compliance promotion and conflict resolution would assist inspectors in their compliance promotion and enforcement roles, which is a particularly challenging area of their work.

²¹⁰ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>, pp. 63-64.

Recommendation 13

The Building Commissioner, in consultation with local governments and other stakeholders, considers improvements to training in compliance promotion and conflict resolution. This could be included as part of the training program developed specifically for inspectors of swimming pool barriers, discussed at Recommendation 12.

7.2.7 All five selected local governments used a system of pairing newly employed inspectors with an experienced inspector as part of their on-the-job training

The NATA Inspection Standard recognises that '[w]here relevant, inspection body staff must have ... completed relevant in-house training',²¹¹ and further that a system is needed to develop less experienced staff, stating:

2. A system to manage the development and appointment of staff must be developed and associated procedures must be documented. It may be possible for a graded system to be developed, allowing for personnel development, enabling recognition of experience while limiting the risks associated with using less experienced staff.²¹²

All five selected local governments stated that all new employees were given a general induction to local government. As part of their on-the-job training processes, all five selected local governments organised for new inspectors to shadow an experienced inspector. The new inspector conducted inspections with the experienced inspector until the experienced inspector assessed the new employee as competent in the role. This process lasted from two to four weeks. Two of the five selected local governments organised for the new inspector to shadow two different experienced inspectors until the experienced inspectors assessed that the new inspector was competent.

7.2.8 There is limited continuous professional development for inspectors

The NATA Inspection Standard identifies that:

4. Where relevant, staff must participate in professional development (for example, through attendance at exhibitions, industry meetings and ongoing training).²¹³

Continuous professional development is particularly relevant to inspectors of swimming pool barriers as the applicable standards have been, and are likely to continue to, change over time.

The Office analysed the professional development provided by the five selected local governments to their inspectors and by the Building Commission. The Office found that there is no continuous professional development program specifically for inspectors on

²¹¹ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, pp. 9-10.

²¹² National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 10.

²¹³ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 10.

undertaking swimming pool inspections. The Office notes that, between April and June 2016, some professional development was provided by the Building Commission regarding changes to the *Building Regulations 2012* and the AS 1926.1-1993. This was in the form of a half-day workshop for both local government inspectors and building surveyors. Four of the five selected local governments reported that their inspectors had attended this workshop. The five selected local governments did not identify any other specific training or professional development opportunities for their inspectors during the previous two years. However, the five selected local governments stated that continuous professional development, including information, education and training about the *Building Regulations 2012* and applicable standards would assist inspectors in undertaking inspections in accordance with the legislation and regulations.

In relation to continuous professional development, the Independent Review Discussion Paper identified:

[T]he ... [inspector] is a quite specialised role and operates in a narrow area, the requirements of the role are quite complex, given the legislative and regulatory requirements and the multiple numbers of pool barrier standards that can apply, depending on when the pool was constructed, its maintenance and the nature of any subsequent work. For these reasons there would appear to be merit in allocating a certain number of hours each year to CPD [Continuous Professional Development], provided it is targeted at the specific function and responsibilities of ... [inspectors].²¹⁴

The Independent Review Discussion Paper's findings regarding New South Wales are also relevant to Western Australia given the three barrier standards that can apply here, depending on when the pool was constructed, its maintenance and the nature of any subsequent work. As discussed at section 7.2.6 the Building Commissioner's education role, pursuant to section 86(h)(i) of the *Building Services (Complaint Resolution and Administration) Act 2011* is to 'provide, or facilitate the provision of, advice, information education and training in relation to ... building standards and codes'.

Recommendation 14

The Building Commissioner, in consultation with local governments and other stakeholders, considers the development and provision of a systematic program of cost-effective continuous professional development for inspectors of swimming pool barriers to support inspectors to remain up-to-date with changes in the legislation, regulations and standards.

7.2.9 Only one of the five selected local governments had a quality assurance process for ensuring consistency of swimming pool barrier inspections across inspectors

The research literature recognises that it is critical that inspections are undertaken in a consistent manner. In relation to the importance of consistency, the OECD Principles recognise:

²¹⁴ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 45.

Lack of consistency between inspectors in the way they interpret requirements, and lack of predictability in what will be expected from the regulated subjects, are issues that not only create burden for businesses – but also result in lower compliance overall, as businesses are discouraged from trying to comply.²¹⁵

The NATA Inspection Standard also identifies that inspection bodies should take steps to ensure that there is consistency in inspections across inspectors:

7. A system to assure confidence in inspections conducted by different inspectors must be developed ... The use of this system must continue at appropriate intervals throughout the employment of the inspector.²¹⁶

In relation to consistency in the inspection of swimming pool barriers, the Independent Review Discussion Paper identified:

... [T]here is a need for an audit program to be conducted ... to review a sample of assessments made by [inspectors]... and provide feedback to [inspectors]. The audit program should also be linked to the training program for there may be best practice examples identified or areas of poor practice that need to be drawn to the attention of all [inspectors].²¹⁷

The Office recognises that the process of pairing newly employed inspectors with experienced inspectors, discussed above, provides for consistency in swimming pool barrier inspections within the local government. However, there is still the potential for the quality of inspections to vary between inspectors, particularly as local governments may use a number of different inspectors, the qualifications considered when recruiting inspectors varies and there is no specific training or continuous professional development on swimming pool barrier inspections provided to inspectors. A quality assurance process, as suggested in the research literature, could assist in ensuring that inspections are conducted in a consistent manner within, and potentially across, local governments.

The Office analysed the inspection processes at the five selected local governments to determine if a quality assurance process was in place to ensure that inspections were conducted in a consistent manner. The Office found that one of the five selected local governments had a quality assurance process in operation - a supervisor at the City of Joondalup reviews the percentage of swimming pool barriers that were found by each inspector to comply with the applicable standards. If the supervisor identifies that an individual inspector consistently finds that more swimming pool barriers comply than the overall average, the supervisor will re-inspect a sample of swimming pool barriers inspected by this inspector. This is an example of good practice that could be considered for wider adoption by other local governments.

²¹⁵ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>, p. 59.

²¹⁶ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 11.

²¹⁷ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 49.

In addition to the potential for the quality of inspections to vary between inspectors within each local government, there is also the potential for the quality of inspections to vary between local governments. Continuous professional development, discussed at section 7.2.8, could assist in promoting consistency and quality in the swimming pool inspection process between local governments. The quality assurance process, discussed above, could also be used by the Building Commissioner to assist in ensuring that inspections are conducted in a consistent, quality manner both between and within local governments.

Recommendation 15

The Building Commissioner considers the promotion of a quality assurance process (for which there is currently a good practice example) for swimming pool barrier inspections to local governments. This quality assurance process could include reviewing a sample of inspections undertaken by each inspector at appropriate intervals throughout the inspection program, with additional information on this process included in the *Inspector Guidelines*.

7.3 Inspection frameworks

7.3.1 The *Building Regulations 2012* require that a swimming pool barrier must comply with applicable standards and these standards form the framework for the inspection

As discussed in Chapter 6, regulation 50 of the *Building Regulations 2012* sets out the circumstances in which a barrier to a private swimming pool is considered to be suitable for restricting access by young children to the pool and its immediate surrounds. At the time of the Investigation, AS 1926.1-1993 set out the technical requirements for a barrier to comply with the *Building Regulations 2012*. Therefore, at the time of the Investigation, AS 1926.1-1993 provided the framework for assessing, through an inspection of the swimming pool barrier, whether or not the barrier was compliant.²¹⁸

7.3.2 The *Inspector Guidelines* establish a sound basis for inspections

The *Inspector Guidelines* provide advice to local governments regarding a number of issues that are relevant to the conduct of inspections, particularly the technical details of the applicable standards.

7.3.3 Appropriate forms are a key element in ensuring the consistent application of the framework

The OECD Principles identify that inspections should be based on appropriate checklists or forms so that the inspection process is undertaken consistently by individual inspectors across their inspections and across different inspectors, as follows:

²¹⁸ Where relevant, the Investigation also took into account the amendments to the *Building Regulations 2012* and the updated *Australian Standard Swimming Pool Safety Part 1: – Safety Barriers for Swimming Pools (AS 1926.1-2012)*.

10. Compliance promotion. Transparency and compliance should be promoted through the use of appropriate instruments such as guidance, toolkits and checklists.²¹⁹

The NATA Inspection Standard also recognises that, where criteria are the basis of compliance (as is the case in the inspections of swimming pool barriers, where the elements of the standards form the criteria), forms and checklists should include these criteria, stating:

7.1 Inspection methods and procedures

...

7.1.4 Where acceptance/rejection criteria are nominated in contracts or specification documents, the criteria should be included, as appropriate, in the worksheets and/or checklists used by the inspection body.²²⁰

7.3.4 Inspection forms at four of the five selected local governments prompted inspectors to identify which standards applied to the swimming pool barrier

As discussed at section 6.6.3, for swimming pools installed before November 2001, compliance with the requirements of regulation 50 of the *Building Regulations 2012* may include a wall that contains a door permitting access through a building, if that door satisfies the requirements of AS 1926.1-1993.²²¹ It is therefore important that the inspector identifies whether or not this concession applies to the swimming pool barrier being inspected. The Office analysed whether the inspection forms at the five selected local governments prompted inspectors to identify whether this concession applied to the swimming pool barrier. The Office identified that this prompt was present on inspection forms at the five selected local governments, except the City of Joondalup.

7.3.5 None of the five selected local governments identified all elements of the relevant standard on their inspection forms

The Office analysed the inspection forms used by the five selected local governments to determine if they provided for the inspection of all elements in AS 1926.1-1993 by identifying these elements and providing a space for recording the result of their inspection. The Office found that, while most elements were identified across all inspection forms, none of the five selected local governments identified all elements of AS 1926.1-1993 on their inspection forms. This practice creates the risk that these elements will not be assessed as part of the inspection process. The elements of AS 1926.1-1993 that were and were not identified on the inspection forms used by the five selected local governments are shown in Figure 47.

²¹⁹ Organisation for Economic Cooperation and Development, *Regulatory Enforcement and Inspections, Best Practice Principles for Regulatory Policy*, OECD Publishing, 2014, viewed 2 August 2015, <<http://www.oecd.org/gov/regulatory-enforcement-and-inspections-9789264208117-en.htm>>, p. 14.

²²⁰ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, p. 15.

²²¹ Where relevant, the Investigation also took into account the amendments to the *Building Regulations 2012* that took effect from 1 May 2016 and the updated *Australian Standard Swimming Pool Safety Part 1: – Safety Barriers for Swimming Pools (AS 1926.1-2012)*.

Figure 47: Elements of AS 1926.1-1993 identified on the inspection forms used by the five selected local governments

Elements of AS 1926.1-1993	Number of local governments that identified the element
Fence and gate strength test	0
The barrier is permanently fixed into position	0
All gates and posts are adequately anchored	1
No climbable objects are within 300 mm of the inside of the gate	1
Child resistant doorsets	1
No climbable objects are within 300 mm of the inside of the fence	2
Retaining walls or balcony do not allow access to the swimming pool	2
Cranked wire or chain wire mesh fencing is greater than 13 mm in diameter but less than 100 mm in diameter	2
Roller door or garage door not allow access to the swimming pool	3
Surface under the gate is stabilised	3
Surface under the fence is stabilised	4
Horizontal members are less than 900 mm apart	4

Source: Ombudsman Western Australia

7.3.6 Inspection forms at all of the five selected local governments provided for recording the inspection outcome and a prompt for inspectors to provide information on how to rectify elements of the barrier that did not comply

The research literature recognises the importance of providing inspection reports that identify areas of non-compliance so that these can be rectified, with the NATA Inspection Standard providing that:

7.4.2 Inspection reports – content

Inspection reports may be simple or complex. ISO/IEC 17020 Clause 7.4.2 mandates some elements, and offers Annex B which identifies optional elements; NATA's Rules include requirements relating to endorsement. Additional reporting requirements may be imposed by the context of the inspection. The text below identifies the source of the element.

...

- o) inspection results ... ;
Results may include reference to specifications, defects or other non-compliances identified;
- p) a statement of conformity where applicable ...²²²

The Office analysed the inspection forms used by the five selected local governments to determine if they provided for recording the outcome of the inspection and related details. Drawing on the elements identified in the NATA Inspection Standard, the elements analysed included:

- a statement of the requirement to comply;
- whether the swimming pool barrier complied with the AS 1926.1-1993;

²²² National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, pp. 18-19.

- an explanation of how to rectify elements of the barrier that did not comply;
- contact details for further enquiries;
- a due date for action to be taken to rectify identified issues; and
- a description of penalties for non-compliance.

The Office found that, as shown in Figure 48, all five selected local governments' inspection forms provided for recording whether the swimming pool barrier complied or did not comply with AS 1926.1-1993, provided a space for an explanation of how to rectify elements that did not comply and included contact details for further inquiries. As also shown in Figure 48, the Office also identified areas for improvement in the forms, as follows:

- the City of Joondalup's inspection form did not provide for identifying whether the swimming pool barrier was required to comply with AS 1926.1-1993;
- the City of Canning's inspection form did not provide for identifying the date due for rectification; and
- the City of Canning's inspection form did not detail the penalties for not complying with the *Building Regulations 2012*.

Figure 48: Outcome elements provided for and included in the inspection forms used by the five selected local governments

Elements	Number of local governments including the element
Statement of the requirement to comply with the <i>Building Regulations 2012</i>	4
Identification that the swimming pool complied or did not comply with the <i>Building Regulations 2012</i> and AS 1926.1-1993	5
Explanation of how to rectify elements that did not comply	5
Contact details for further enquiries	5
Date due for rectification of identified issues	4
Description of penalties for not complying with the <i>Building Regulations 2012</i> and AS 1926.1-1993	4

Source: Ombudsman Western Australia

In summary, the Investigation found that inspection forms vary across local governments, and that none of the five selected local governments' inspection forms identified all the elements of AS 1926.1-1993.

Recommendation 16

The Building Commissioner works with local governments and other stakeholders to develop a template swimming pool barrier inspection checklist template, which incorporates all of the required elements to meet the applicable standards, and is as efficient to complete as possible for inspectors, for use across local governments.

7.4 Inspection records

While it is not a legislative requirement that an inspection form be used, section 130(c) of the *Building Act 2011* requires local governments to keep records of inspections of barriers to a private swimming pool. The Office examined the 485 inspection records and the 474 inspection forms completed by inspectors at the five selected local governments (11 inspection forms were not completed as the inspector found the swimming pool was emptied or removed), to determine if the inspection form was completed in full.

7.4.1 Three of the five selected local governments consistently recorded which standard applied to the swimming pool barrier on the completed inspection forms

As identified at section 7.3.4, inspection forms at four of the five selected local governments prompted inspectors to identify if concessions applied to the swimming pool barrier. The Office also reviewed the completed inspection forms for the five selected local governments to identify whether this information was recorded in these inspection forms. The Office found that inspectors within the five selected local governments recorded the applicability of concessions as follows (Figure 49):

- The City of Bayswater, City of Canning and City of Mandurah recorded whether concessions applied on 98 per cent of inspection forms;
- The City of Rockingham recorded whether concessions applied on 23 per cent of inspection forms; and
- The City of Joondalup did not include on the inspection form whether concessions applied and no inspectors separately recorded this information.

Figure 49: Identification of the applicability of concessions by the five selected local governments

Local government	Percentage of inspection forms where it was recorded if concessions applied
City of Bayswater	98
City of Canning	98
City of Joondalup	0
City of Mandurah	98
City of Rockingham	23

Source: Ombudsman Western Australia

7.4.2 Two of the five selected local governments consistently recorded the outcome of the inspection on the completed inspection forms

The Office found that inspectors at the five selected local governments completed the inspection forms as follows (Figure 50):

- the elements of AS 1926.1-1993 that were included in the five selected local governments' inspection form were completed on:
 - 95 per cent of inspection forms at the City of Bayswater and the City of Canning;
 - 45 per cent of inspection forms at the City of Joondalup;
 - 26 per cent of inspection forms at the City of Rockingham; and

- 17 per cent of inspection forms at the City of Mandurah;
- the outcome of the inspection was recorded on:
 - 100 per cent of inspection forms at the City of Mandurah and the City of Rockingham;
 - 92 per cent of inspection forms at the City of Bayswater and the City of Canning; and
 - 81 per cent of inspection forms at the City of Joondalup.

Figure 50: Completion of inspection forms at the five selected local governments

Local government	Percentage of elements of the AS 1926.1-1993 that were included in the inspection form and completed	Percentage of inspection forms where the outcome of the inspection was recorded
City of Bayswater	95	92
City of Canning	95	92
City of Joondalup	45	81
City of Mandurah	17	100
City of Rockingham	26	100

Source: Ombudsman Western Australia

7.4.3 Four of the five selected local governments consistently recorded all other essential details on the completed inspection forms

Neither the legislation (*Building Act 2011* and *Building Regulations 2012*) nor the *Inspector Guidelines* provide information regarding the other essential details of the inspection that need to, or should, be recorded. The NATA Inspection Standard provides for the key elements of such records to include:

7.4.2 Inspection reports – content

...

c) unique identification of the report

...

e) identification of the client

...

g) date(s) of inspection...

h) information on where the inspection was carried out

...

t) names (or unique identification) of the personnel members who have performed the inspection ...

u) signature or other indication of approval, by authorised personnel ...²²³

The Office analysed the completed inspection forms at the five selected local governments to determine if inspectors recorded this information, which this report terms ‘record

²²³ National Association of Testing Authorities, *The ISO/IEC 17020 Inspection Standard Application Document*, 2015, Australia, pp. 18-19.

keeping elements'. Consistent with the research literature, the record keeping elements analysed by the Office included:

- an identification number linked to the building permit for the swimming pool;
- the name and address of the property owner;
- the date of the inspection; and
- the inspector's name or signature.

The Office found that inspectors from four of the five selected local governments consistently recorded all of the record keeping elements on the inspection forms (more than 95 per cent of the time).²²⁴ However, the Office found that at the City of Bayswater, inspectors recorded the property owner's name on 26 per cent of the forms and wrote 'owner' or 'occupier' on the remainder of the forms (Figure 51).

Figure 51: Percentage of elements recorded on the completed inspection forms by the five selected local governments

Local government	Identification number linked to the building permit	Name of property owner	Address of property	Date of inspection	Inspector's name or signature
City of Bayswater	100	26	100	100	96
City of Canning	99	100	100	100	100
City of Joondalup	98	97	100	100	100
City of Mandurah	100	100	100	100	99
City of Rockingham	100	95	100	100	95

Source: Ombudsman Western Australia

Recommendation 17

In implementing Recommendation 12, the Building Commissioner works with local governments to (at least cost to taxpayers and ratepayers):

- ensure that the training program for inspectors of swimming pool barriers includes specific training on the template swimming pool barrier inspection form and the requirement to complete all elements of the form; and
- to develop a quality assurance process for ensuring that all elements of swimming pool barrier inspection forms are consistently completed.

²²⁴ The Office used 95 per cent or more as the cut off for completion based on the Australian Accounting Standards Board's *Accounting Standard 1031 Materiality*, which states that 'an amount which is equal to or less than 5 per cent of the appropriate base amount may be presumed not to be material unless there is evidence, or convincing argument, to the contrary.' (Australian Accounting Standards Board, *Accounting Standard 1031 Materiality*, July 2004, p. 12).

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8 Enforcement of regulation 50(1) of the *Building Regulations 2012*

8.1 The role of enforcement in administering regulations

As identified at section 6.6.1, the Office found that between eight and 52 per cent of swimming pool barriers inspected by the five selected local governments did not comply with regulation 50(1) of the *Building Regulations 2012* on initial inspection. The Office further found that, in the local government survey, 72 local governments reported that they had undertaken 26,405 initial inspections and that 13,358 (51 per cent) of the swimming pool barriers inspected were found to comply at this inspection. In the context of these low compliance levels, the Office undertook a literature review of factors that affect compliance with regulation and the role of enforcement in increasing compliance. The Office also took into account that the enforcement of regulation 50(1) of the *Building Regulations 2012* falls largely to local governments and the type of enforcement measures available to local governments under the *Building Act 2011* and the *Building Regulations 2012*.

The research literature identifies that, 'regulation refers to a set of authoritative rules accompanied by a mechanism, usually administered by a public agency, for monitoring and promoting compliance with those rules'.²²⁵ The research literature also identifies that the '[b]enefits from regulation can take many forms but these can be distilled down to an improvement in the welfare of an individual or group ...'²²⁶

Regulatory schemes and regulatory institutions play a vital role in preserving and advancing public interests ...

and:

All regulatory regimes, designed **and** implemented well, can deliver economic, social, cultural and environmental benefits as well as protecting communities from harm. [Original emphasis]²²⁷

Of course, well designed and implemented regulatory systems should be cost-beneficial, that is the cost of their design, implementation, and ongoing compliance should be outweighed by the benefits of the regulations.²²⁸ Similarly, regulatory design should actively avoid any unintended undesirable consequences of the regulation.²²⁹ The research literature identifies factors that are known to drive compliance with regulations. In particular, the 'Table of Eleven', published by the OECD, 'derives from academic literature in the areas of social psychology, sociology and criminology.'²³⁰ The Table of Eleven identifies factors that increase the likelihood of compliance, as follows:

²²⁵ Johnstone, R and Sarre, R, *Regulation: Enforcement and Compliance*, Australian Institute of Criminology, Canberra, 2004, p. v.

²²⁶ Guerin, K, *Encouraging Quality Regulation: Theories and Tools*, New Zealand Treasury, Wellington, 2003, p. 5.

²²⁷ Patena, K, and Woolley, E, 'Effective compliance and enforcement strategies,' Meredith Connell, New Zealand Planning Institute Environmental Compliance Conference, Auckland, 2013, Perth Public Hearing, Friday 23 March 2007, 9.00am.

²²⁸ Field, C, 'Recent Evolutions in Australian Ombudsmen', 2009, *AIAL Forum*, 63, pp. 4-12.

²²⁹ Field, C, 'Recent Evolutions in Australian Ombudsmen', 2009, *AIAL Forum*, 63, pp. 4-12.

²³⁰ Organisation for Economic Cooperation and Development, *Better Regulation in Europe: Netherlands*, OECD, Paris, 2010, p. 109.

- Aspects of spontaneous compliance:
 1. Knowledge of the regulation
 2. Costs of compliance/benefits of non-compliance
 3. Degree of business and popular acceptance of the regulation
 4. Loyalty and natural obedience of the regulated firm
 5. Extent of informal monitoring
- Aspects of monitoring
 6. Probability of report through informal channels
 7. Probability of inspection
 8. Probability of detection
 9. Selectivity of the inspector
- Aspects of sanctions
 10. Chance of sanctions
 11. Severity of sanctions²³¹

In terms of the framework established by the Table of Eleven, the Office has analysed aspects of spontaneous compliance ‘that is, compliance that would occur in the absence of enforcement’,²³² in Chapter 4 of this report, and aspects of monitoring in Chapter 6 and Chapter 7. This Chapter focuses on aspects of sanctions.

By identifying the drivers of compliance, the Table of Eleven can also aid in identifying ‘the strong and weak points of enforcement of’²³³ a particular regulation. Informed by understandings of the drivers of compliance, the effective enforcement of regulations continues to be the focus of ongoing research. Ayres and Braithwaite, whose theory of ‘responsive regulation’ ‘[has] become [a] touchstone in the contemporary study and practice of regulation’,²³⁴ identify that sound regulatory enforcement policy cannot be based totally on persuasion or totally on punishment. At the core of responsive regulation is the concept that ‘compliance is most likely when a regulatory agency displays an explicit enforcement pyramid’.²³⁵

At the base are advisory and persuasive measures, in the middle are mild administrative sanctions and at the top are more punitive sanctions, determined to be sufficiently undesirable to halt the behaviour of the most determined offenders. According to its authors, regulators should focus most of their activity at the bottom and only escalate measures if absolutely necessary and de-escalate when possible. The preference for being at the bottom of the pyramid is a presumptive preference that will often be overridden. Pyramids are more likely to be effective when they have a credible enforcement peak.²³⁶

²³¹ Hampton, P, *Reducing administrative burdens: effective inspection and enforcement*, HM Treasury, 2005, Norwich, p. 57.

²³² Organisation for Economic Cooperation and Development, *Better Regulation in Europe: Netherlands*, OECD, Paris, 2010, p. 109.

²³³ Dutch Ministry of Justice, *The ‘Table of Eleven’: A versatile tool*, Dutch Ministry of Justice, The Hague, 2004, p. 4.

²³⁴ Kolieb, J, ‘When to punish, when to persuade and when to reward: Strengthening responsive regulation with the regulatory diamond’, *Monash University Law Review*, 2015, vol. 41, no. 1, pp. 136-162.

²³⁵ Comino, V, ‘The Challenge of Corporate Law Enforcement in Australia,’ *Australian Journal of Corporate Law*, 23, 3, 2009, pp. 233-265.

²³⁶ Wood, C, Ivec, M, Job, J, and Braithwaite, V, *Applications of Responsive Regulatory Theory in Australia and Overseas*, Australian National University, Canberra, 2010, p. 3.

With respect to compliance with regulation 50(1) of the *Building Regulations 2012*, legislation and regulations provide local governments with three enforcement measures to encourage and achieve compliance:

- issuing infringement notices;
- prosecution; and
- issuing building orders.

Each of these measures is discussed in more detail below.

8.2 Local governments may issue infringement notices to owners or occupiers for swimming pool barriers that do not comply with the *Building Regulations 2012*

8.2.1 Legislative requirements

Legislation provides for local governments to appoint authorised officers who may issue infringement notices to owners or occupiers when swimming pool barriers are found not to comply with regulation 50(1) of the *Building Regulations 2012*. Regulation 69 of the *Building Regulations 2012* provides for prescribed offences and modified penalties, as follows:

69. Prescribed offences and modified penalties

- (1) The offences specified in Schedule 6 are offences for which an infringement notice may be issued under the *Criminal Procedure Act 2004* Part 2.
- (2) The modified penalty specified opposite an offence in Schedule 6 is the modified penalty for that offence for the purposes of the *Criminal Procedure Act 2004* section 5(3).

Schedule 6 sets out the specific offences and the associated modified penalties as follows:

Schedule 6 – Prescribed offences and modified penalties

[r. 69(1) and (2)]

Offences		Modified penalty (\$)
r. 50(1)	Barrier to private swimming pool	750

...

Regulation 70 of the *Building Regulations 2012* provides that a local government (as a permit authority) may appoint approved and authorised officers for the purposes of sections 6(a) and (b) of the *Criminal Procedure Act 2004 (WA)*, as follows:

70. Approved officers and authorised officers

- (1) A permit authority that is a local government may, in writing, appoint to be an approved officer for the purposes of the *Criminal Procedure Act 2004* section 6(a), a person appointed under the *Local Government Act 1995* section 9.10(1) and authorised for the purpose of performing functions under section 9.19 or 9.20 of that Act.
- (2) A permit authority that is a local government may, in writing, appoint to be an authorised officer for the purposes of the *Criminal Procedure Act 2004* section 6(b), a person appointed under the *Local Government Act 1995* section 9.10(1) and authorised for the purpose of performing functions under section 9.16 of that Act.
- (3) A permit authority that is a local government must issue each of its authorised officers a certificate of the person's appointment, and the person must produce the certificate whenever required to do so by a person who has been or is about to be affected by any exercise of authority by the authorised person.

Section 6 of the *Criminal Procedure Act 2004 (WA)* provides for the appointment of approved and authorised officers who may be authorised to issue infringement notices, providing:

6. Other matters to be prescribed by prescribed Acts

If under section 5 regulations are made under a prescribed Act and prescribe an offence, the regulations must also —

- (a) provide for the appointment of approved officers in relation to infringement notices that may be issued under this Part for the prescribed offence; and
- (b) provide for the appointment of authorised officers in relation to infringement notices that may be issued under this Part for the prescribed offence; and
- (c) provide for the means by which authorised officers can show they are authorised to issue infringement notices; and
- (d) prescribe the form of infringement notices that may be issued under this Part for the prescribed offence; and
- (e) prescribe any other forms required to be prescribed by this Part in relation to infringement notices that may be issued under this Part for the prescribed offence.

The *Building Act 2011* is a prescribed Act, pursuant to the *Criminal Procedure Regulations 2005*, Schedule 1A — Infringement notices: prescribed Acts.

8.2.2 Guidelines

The *Inspector Guidelines* provide advice in relation to enforcement, including infringement notices, as follows:

The local government is responsible for enforcing swimming pool safety barrier compliance and the Regulations set out specific requirements and penalties to carry out this role.

Part 10 of the Regulations sets out:

- prescribed offences and modified penalties;
- requirements for the appointment of authorised officers and approved officers, including certificates (note that this is different from an authorised person); and
- the specific forms to be used when issuing or withdrawing an infringement notice (Schedule 7).

Schedule 6 sets out the offences for which an infringement notice may be issued and the corresponding modified penalty.

Generally for swimming pool barrier non-compliance the applicable offence is Building Regulations 2012 regulation 50(1):

- Each owner and occupier of premises on which there is a private swimming pool containing water that is more than 300 mm deep must ensure that there is installed or provided around the pool a barrier that restricts access by young children to the pool and its immediate surrounds.²³⁷

8.2.3 Two of the five selected local governments issued infringement notices for non-compliant swimming pool barriers between 1 July 2014 to 30 June 2015

As identified at section 6.6.1, from 1 July 2014 to 30 June 2015, between eight and 52 per cent of swimming pool barriers inspected by the five selected local governments were found not to comply with regulation 50(1) of the *Building Regulations 2012* on initial inspection. The Office also obtained information from the five selected local governments regarding their use of infringement notices in response to non-compliance with regulation 50(1) of the *Building Regulations 2012*.

Of the five selected local governments, two local governments (the City of Canning and the City of Rockingham) reported that they had issued infringement notices from 1 July 2014 to 30 June 2015 for swimming pool barriers that did not comply with regulation 50(1), as follows:

- the City of Canning reported that it issued three infringement notices for offences pursuant to regulation 50(1) of the *Building Regulations 2012*. The City of Canning further informed the Office that, if the infringement notice is not paid within 28 days or if the owner or occupier chooses to appeal the infringement notice, then it is the City's policy to refer the matter to its solicitors; and
- the City of Rockingham reported that it issued two infringement notices for offences pursuant to regulation 50(1) of the *Building Regulations 2012*.

The City of Bayswater, City of Joondalup and City of Mandurah informed the Office that they did not issue any infringement notices from 1 July 2014 to 30 June 2015 for offences pursuant to regulation 50(1) of the *Building Regulations 2012*. The City of Joondalup further informed the Office that it does not infringe owners or occupiers for non-compliant

²³⁷ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 9.

swimming pool barriers but rather the owners are given the opportunity to ensure compliance, and if this is not done then the City will proceed directly to prosecution.

8.2.4 Nine of the 138 survey respondents reported having issued a total of 77 infringement notices for non-compliant swimming pool barriers between 1 July 2014 and 30 June 2015

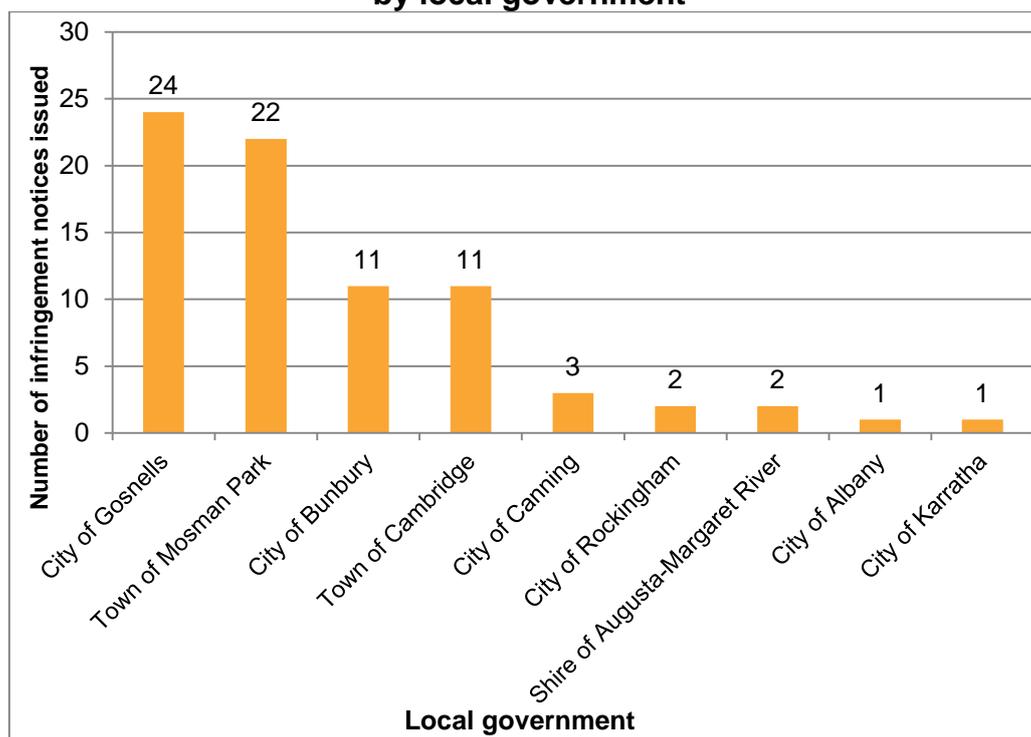
In the local government survey, the Office requested information about whether the local government had issued an infringement notice from 1 July 2014 to 30 June 2015 for swimming pool barriers that did not comply with regulation 50(1) of the *Building Regulations 2012*. The Office found that, of the 138 survey respondents:

- one hundred and eight (78 per cent) local governments reported that they had not issued any infringement notices;
- nine (seven per cent) local governments reported that they had issued infringement notices;
- ten (seven per cent) local governments did not know if they had issued infringement notices;²³⁸ and
- eleven (eight per cent) local governments reported that they did not have any recorded swimming pools in their district.

The nine local governments that reported that they had issued infringement notices for swimming pool barriers that did not comply with regulation 50(1) of the *Building Regulations 2012* reported that they had issued a total of 77 infringement notices between 1 July 2014 and 30 June 2015, as shown in Figure 52.

²³⁸ This includes the City of Rockingham, which was not asked this question as it took part in a pilot of the survey.

Figure 52: Infringement notices issued from 1 July 2014 to 30 June 2015, by local government



Source: Ombudsman Western Australia

8.3 Local governments may commence proceedings to prosecute owners for swimming pool barriers that do not comply with the *Building Regulations 2012*

8.3.1 Legislative requirements

The *Building Act 2011* and *Building Regulations 2012* also authorise the commencement of prosecutions for failing to install or provide a swimming pool barrier that complies with regulation 50(1) of the *Building Regulations 2012*. Section 133 of the *Building Act 2011* provides for prosecutions for an offence against the Act to be commenced by a local government (as a permit authority) including, as follows:

133. Prosecutions

- (1) A prosecution for an offence against this Act may be commenced by, and only by —
 - (a) a permit authority or a person authorised to do so by a permit authority; or
 - (b) a local government or a person authorised to do so by a local government.
- (2) Subsection (1) does not limit the functions of the Director of Public Prosecutions under the *Director of Public Prosecutions Act 1991* section 11.

- (3) A prosecution for an offence against section 9, 10, 29(1) or (2), 37(1) or (2), 38(1) or (2), 76(1), 77, 78(1), (2) or (3), or 79(1) or (2) may be commenced within 6 years after the offence was allegedly committed, but not later.
- (4) A prosecution for any other offence against this Act may be commenced within 3 years after the offence was allegedly committed, but not later.
- (5) All prosecutions for offences against this Act are to be heard in a court of summary jurisdiction constituted by a magistrate.

8.3.2 Guidelines

The *Inspector Guidelines* do not provide any advice to local governments in relation to commencing prosecution for non-compliant swimming pool barriers, except for encouraging local governments to seek legal advice.²³⁹

8.3.3 Six local governments reported having commenced proceedings to prosecute owners on seven occasions for non-compliant swimming pool barriers from 1 July 2014 and 30 June 2015

Of the five selected local governments, one local government, the City of Joondalup, reported that it had commenced two prosecutions between 1 July 2014 and 30 June 2015 for failure to comply with regulation 50(1) of the *Building Regulations 2012*. The City of Joondalup informed the Office that, between July 2014 and June 2015, the City prosecuted the same owner on two occasions for separate offences relating to a non-compliant swimming pool barrier. The City of Bayswater, the City of Canning, the City of Mandurah and the City of Rockingham informed the Office that between 1 July 2014 and 30 June 2015 they did not commence any prosecutions for failure to comply with regulation 50(1) of the *Building Regulations 2012*.

As part of the local government survey, all local governments were asked to identify the number of prosecutions that they had commenced between 1 July 2014 and 30 June 2015 for failure to comply with regulation 50(1) of the *Building Regulations 2012*. The Office found that, of the 138 survey respondents:

- six (four per cent) local governments (including the City of Joondalup) reported that they had commenced a total of seven prosecutions between 1 July 2014 and 30 June 2015;
- 123 (89 per cent) local governments reported that they had not commenced any prosecutions between 1 July 2014 and 30 June 2015 (including 11 local governments that did not have any recorded swimming pools in their district); and
- nine (seven per cent) local governments reported that they did not know whether they had commenced prosecutions between 1 July 2014 and 30 June 2015.

²³⁹ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 9.

The six local governments who reported having commenced seven prosecutions between 1 July 2014 and 30 June 2015 were:

- the Town of Cambridge, which reported having commenced one prosecution;
- the City of Greater Geraldton, which reported having commenced one prosecution;
- the City of Gosnells, which reported having commenced one prosecution;
- the City of Kwinana, which reported having commenced one prosecution;
- the Town of Victoria Park, which reported having commenced one prosecution; and
- the City of Joondalup, which reported having commenced two prosecutions.

8.4 Local governments may make a building order so that the person named must take action to ensure the swimming pool barrier complies with the *Building Regulations 2012*

8.4.1 Legislative requirements

During the Investigation, local governments informed the Office that, as an alternative to infringement notices and prosecutions for offences pursuant to regulation 50(1) of the *Building Regulations 2012*, local governments may make building orders in relation to swimming pool barriers.

Section 110(1) of the *Building Act 2011* provides that building orders may be made by local governments (as permit authorities) as follows:

110. Building orders

- (1) A permit authority may make an order (a **building order**) in respect of one or more of the following —
 - (a) particular building work;
 - (b) particular demolition work;
 - (c) a particular building or incidental structure, whether completed before or after commencement day.
- (2) A building order must be in an approved form and must be directed to any one or more of the following persons as is appropriate in the case —
 - (a) if a building permit is in effect for the particular building work, the person named as the builder on the permit;
 - (b) if a demolition permit is in effect for the particular demolition work, the person named as the demolition contractor on the permit;
 - (c) a person who is an owner of the land on which the particular building or demolition work is being, or has been, done;

- (d) a person who is an owner or occupier of the land on which the particular building or incidental structure is located.

Section 112 of the *Building Act 2011* provides that a building order may require a person to do one or more specified actions, including specified building or demolition work to swimming pool barriers (as incidental structures) so as to prevent or stop a suspected contravention of the Act, as follows:

112. Content of building order

...

- (2) A building order may require a person to whom the order is directed to do any one or more of the following within the specified time —

...

- (c) to do specified building or demolition work, or alter a building or incidental structure in a specified way, so as to prevent or stop a suspected contravention of this Act;
- (d) to take or not take specified action so as to prevent or stop a suspected contravention of this Act:

...

Section 115 of the *Building Act 2011* provides the penalties for failing to comply with a building order as follows:

115. Compliance with building order

A person who is served with a copy of a building order must not without reasonable excuse fail to comply with the order.

Penalty:

- (a) for a first offence, a fine of \$50 000;
- (b) for a second offence, a fine of \$75 000;
- (c) for a third or subsequent offence, a fine of \$100 000 and imprisonment for 12 months.

Section 118 of the *Building Act 2011* further provides that, if there is non-compliance with the building order, a local government (as a permit authority) may give effect to the building order and then recover the reasonable costs and expenses of doing so, as follows:

118. Permit authority may give effect to building order if non-compliance

...

- (2) If there is non-compliance with an order the permit authority that made the relevant building order may cause an authorised person —
 - (a) to take any action specified in the order; or
 - (b) to commence or complete any work specified in the order; or
 - (c) if any specified action was required by the order to cease, to take such steps as are reasonable in the circumstances to cause the action to cease.
- (3) The permit authority may, in a court of competent jurisdiction, recover as a debt from a person who has been served with a copy of a building order the reasonable costs and expenses incurred in doing anything under subsection (2) in relation to the order.
- (4) In a proceeding under subsection (3), a document apparently signed by an authorised certifier in relation to the permit authority, as defined by section 140(2), specifying details of the reasonable costs and expenses incurred is, in the absence of evidence to the contrary, proof of the details specified.

In summary, section 118 of the *Building Act 2011* provides local governments with a powerful enforcement mechanism, in particular as it permits a local government (as a permit authority) to take the actions specified in the building order (where the order has not been complied with) without having to apply to the court to do so.²⁴⁰

8.4.2 Guidelines

The *Inspector Guidelines* provide advice in relation to making building orders, as follows:

The Act sets out specific requirements regarding the making of building orders.

...

Section 110(1) of the Act allows orders to be made in respect of building or demolition work (ie work that is currently under way) or in respect of a building or incidental structure, whether completed or not, and whether completed before or after commencement day.

²⁴⁰ For example see *Laurent v City Of Greater Geraldton* [2016] WASC 48.

Section 110(2) of the Act requires building orders to be in a consistent form and to be given to the person best able to respond to the order. Where building or demolition work is under way and a building or demolition permit is in place, the most appropriate person will be the builder or demolition contractor named on the permit. Where no permit is in place, or where the builder or demolition contractor is not available, the most appropriate person is the owner, or is in some cases, the occupier.

Section 111(1) of the Act requires an authorised person to give 14 days' notice of a proposed building order and why it is proposed to be issued. A person given notice can respond and the response must be considered before the building order has effect.

In any case, permit authorities may seek legal advice in regards to the use of building orders to ensure compliance with the legislation.²⁴¹

8.4.3 Local governments reported that building orders are more effective than infringement notices or prosecutions in achieving compliance with regulation 50(1) of the *Building Regulations 2012*

One of the five selected local governments (the City of Canning) stated that it had issued one building order from 1 July 2014 to 30 June 2015. The City of Canning informed the Office that it had issued a building order rather than prosecuting the owner as the maximum penalty for a first offence for failing to comply with a building order is \$50,000 compared with \$5,000 for failing to comply with regulation 50(1) of the *Building Regulations 2012*.

In response to questions regarding enforcement, two of the 138 survey respondents also stated that they issue building orders, rather than infringement notices, when a swimming pool barrier is found not to comply with regulation 50(1) of the *Building Regulations 2012*. These local governments also reported that building orders are more effective in ensuring compliance because of the higher maximum penalties. Comments received in the survey from local governments included:

Penalties and infringements need to be given horsepower to make them effectively enforceable.

and:

The City ... prefers to use the Building Order option rather than issuing infringements to address owners who fail to comply with requests to make their pool barriers compliant. Our preferred option has more weight and its threat has proven to be more effective in achieving compliance. The City has found it necessary to issue 2 Building Orders during the reporting period.

The view expressed by these local governments, that the higher maximum penalties associated with a building order makes it a more effective enforcement strategy than infringements and prosecutions, is consistent with the regulatory theory discussed in the research literature.

²⁴¹ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, pp. 8- 9.

8.5 Overall, the sanctions available to enforce regulation 50(1) of the *Building Regulations 2012* are not being used as effectively as they could be and this could be undermining the effectiveness of the regulations

8.5.1 Local governments have used the re-inspection process effectively as a persuasive enforcement measure

As discussed in section 6.7, local governments may re-inspect a swimming pool barrier if the initial inspection identifies that the swimming pool barrier does not comply with regulation 50(1) of the *Building Regulations 2012*. As identified in the *Inspector Guidelines*, '[i]t is commonplace for the pool inspector to reinspect a non-compliant safety barrier to ensure compliance has been achieved.'²⁴²

As also identified in section 6.7, the Office analysed the 485 inspection forms obtained from the five selected local governments to determine if barriers that were found not to comply with the *Building Regulations 2012* on initial inspection were subsequently re-inspected. Of the 485 barriers, 159 swimming pool barriers were found not to comply on initial inspection. The Office found that 128 of the 159 barriers were re-inspected (81 per cent). The Office undertook further analysis to determine whether the re-inspections resulted in compliance with the *Building Regulations 2012*. Overall, the Office found that the re-inspection process increased the percentage of private swimming pools that ultimately complied with the *Building Regulations 2012*.

As identified in section 6.6.1, of the 138 survey respondents, 75 local governments reported that they had undertaken 37,363 initial inspections between 1 July 2014 and 30 June 2015. Of these 75 local governments, 72 local governments were able to report on how many swimming pool barriers were found to be compliant with the *Building Regulations 2012* at initial inspection. These 72 local governments reported that they had undertaken 26,405 initial inspections and that 13,358 (51 per cent) of these swimming pool barriers were found to comply at the initial inspection and 13,047 swimming pool barriers were found not to comply.

Of the 75 local governments that reported the number of initial inspections undertaken, 55 local governments (73 per cent) reported that they undertook 12,087 first re-inspections. That is, 93 per cent of swimming pool barriers that were found to be non-compliant at the initial inspection (13,047 barriers) were re-inspected. Fifty-three of these 55 survey respondents reported that they had found a further 6,330 barriers to be compliant after the first re-inspection, with 6,717 barriers found to be non-compliant.

The Office's findings indicate that the re-inspection process is being used effectively by some local governments as a persuasive enforcement measure to improve compliance with regulation 50(1) of the *Building Regulations 2012*. This effectiveness could potentially be enhanced further by the introduction of fees for re-inspections, as discussed at section 6.8.

²⁴² Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 8.

8.5.2 Collectively, 84 sanctions were issued by local governments in response to 13,047 potential offences pursuant to regulation 50(1) of the *Building Regulations 2012*; this equates to a 1 in 155 chance of a sanction being imposed

Local governments' focus on using re-inspection, while effective in increasing compliance, also gives rise to risks. As discussed in detail at section 6.7 and above, the Office found that, upon initial inspection, 8 per cent to 52 per cent of swimming pool barriers were found to be non-compliant with regulation 50(1) of the *Building Regulations 2012*. This meant that, while many of these barriers were later made compliant through subsequent re-inspections, at any point over the four year period between inspections (or longer, as set out at section 6.5.4 that the five selected local governments had inspected between 12 per cent and 54 per cent of swimming pool barriers due for inspection over the four year period), up to 52 per cent of all swimming pool barriers may have been non-compliant with regulation 50(1) and were therefore not restricting access by young children to the pool and its immediate surrounds (as set out at section 6.6.1).

This situation is reflected in the research literature discussed at section 8.1, which recognises that effective regulatory enforcement cannot be based solely on persuasion. The research literature suggests that, in an enforcement pyramid, persuasive measures should be the focus and make up the base of the pyramid.²⁴³ However, for these persuasive mechanisms to be effective, the pyramid must also have a 'credible enforcement peak',²⁴⁴ that is, punitive mechanisms or sanctions. The research literature further suggests that the credibility of the enforcement peak is influenced by two factors; the chance and severity of sanctions. The Office has identified issues in relation to both of these factors in relation to the inspection of swimming pool barriers.

In relation to the chance of sanctions, the Office found that 72 local governments reported that of 26,405 initial inspections they identified 13,047 swimming pool barriers that did not comply with regulation 50(1) of the *Building Regulations 2012*. However, sanctions were rarely imposed, with the 138 survey respondents reporting that, in the same period, they:

- issued a total of 77 infringement notices; and
- commenced proceedings to prosecute owners on seven occasions.²⁴⁵

Collectively, this indicates that 84 sanctions were imposed by local governments in response to 13,047 potential offences pursuant to regulation 50(1) of the *Building Regulations 2012* (that is, in response to 0.7 per cent of potential offences). The probability of a sanction being imposed was one in 155.

In relation to the severity of sanctions, during the Investigation, the five selected local governments reported that one reason they do not make use of these sanctions is that the severity of the sanction is not sufficient to achieve compliance, with local governments expressing views, for example, that:

²⁴³ Wood, C, Ivec, M, Job, J, and Braithwaite, V, *Applications of Responsive Regulatory Theory in Australia and Overseas*, Australian National University, Canberra, 2010, p. 3.

²⁴⁴ Wood, C, Ivec, M, Job, J, and Braithwaite, V, *Applications of Responsive Regulatory Theory in Australia and Overseas*, Australian National University, Canberra, 2010, p. 3.

²⁴⁵ This includes the two prosecutions commenced by the City of Joondalup.

The modified penalty of \$750 (associated with an infringement notice) is so modest compared to the construction of a swimming pool barrier, which can amount to several thousand dollars, that infringement notices are ineffective and therefore it is a waste of time issuing them.

and:

Even when prosecutions are successful, the penalties are so low that they are ineffective, so it is a waste of time and money commencing them.

The Office has also found that, as an alternative to infringement notices and prosecutions, which specifically relate to offences pursuant to regulation 50(1), some local governments make building orders. These local governments reported that the penalties for non-compliance with a building order are more effective than penalties imposed by the court or associated with an infringement notice. However, of the five selected local governments, only one local government reported making one building order.

8.5.3 An evidence-based enforcement strategy for the local government sector needs to be developed to improve compliance with regulation 50(1) of the *Building Regulations 2012*

The 2002 *Report of the Standing Committee on Environment and Public Affairs in Relation to Swimming Pool Fencing (the Parliamentary Report)* identified that '[t]here is considerable scope for an improvement in swimming pool fencing inspection, enforcement and public education'²⁴⁶ in Western Australia, with submissions identifying 'significant problems with interpretation, enforcement and implementation of Acts and Regulations relating to swimming pool fencing and pool safety generally.'²⁴⁷ The Parliamentary Report identified the need for the 'development of enforcement protocols' in Western Australia.²⁴⁸ The RLSSA has similarly identified that '[c]ompliance levels would be improved by a common approach to monitoring and enforcement'.²⁴⁹

While the *Inspector Guidelines* make reference to the legislation applicable to each enforcement option, they provide no guidance to local governments on how these options should be used effectively, instead they merely instruct local governments to seek legal advice. In summary, there is currently no model or broadly applicable strategy for the enforcement of regulations regarding swimming pool barriers in Western Australia.

As identified in the research literature discussed in this Chapter, 'a regulatory framework relies on effective enforcement by the regulator',²⁵⁰ and even the best regulation is 'ineffective without means of enforcement.'²⁵¹ In this context, under-enforcement of

²⁴⁶ Western Australian Parliament, *Report of the Standing Committee on Environment and Public Affairs in Relation to Swimming Pool Fencing*, Western Australian Parliament, 2002, Perth, p. ii.

²⁴⁷ Western Australian Parliament, *Report of the Standing Committee on Environment and Public Affairs in Relation to Swimming Pool Fencing*, Western Australian Parliament, 2002, Perth, p. 8.

²⁴⁸ Western Australian Parliament, *Report of the Standing Committee on Environment and Public Affairs in Relation to Swimming Pool Fencing*, Western Australian Parliament, 2002, Perth, p. iv.

²⁴⁹ Royal Life Saving Society Australia, *Position Paper: Nationally consistent regulation of pool barriers*, Royal Life Saving Society Australia, 2007, Broadway, p. 5.

²⁵⁰ Financial System Inquiry, *Financial System Inquiry – Interim Report*, Commonwealth of Australia, Canberra, 2014, pp. 3-54.

²⁵¹ United Nations Environment Programme, *Africa-Asia Expert Meeting on Enforcement of Environmental Law*, UNEP, Beijing, 2014, p. 1.

regulations for swimming pool barriers could be undermining the effectiveness of a key mechanism for reducing the number of drowning incidents involving children.

Pursuant to section 86 of the *Building Services (Complaint Resolution and Administration) Act 2011*, the Building Commissioner has a role to monitor developments relevant to the regulation of building services in Western Australia, as follows:

86. Functions

The Building Commissioner has the following functions —

(a) to monitor developments relevant to the regulation of building services in the State;

...

[and]

...

(h) to provide, or facilitate the provision of, advice, information, education and training in relation to —

(i) building standards and codes; and

(ii) consumer protection in relation to building services;

On this basis, it is proposed that the Building Commissioner work with local governments and other stakeholders to develop and implement an evidence-based enforcement strategy, which includes measures at all levels of the enforcement pyramid, including the use of sanctions, for application by local governments.

In developing an evidence-based enforcement strategy, the Building Commissioner should take into account the Office's earlier findings and recommendations regarding:

- the effectiveness of re-inspections as a persuasive mechanism for encouraging and achieving compliance with regulation 50(1) of the *Building Regulations 2012* (discussed at section 6.7); and
- establishing a fee specifically to cover the cost of re-inspections to further enhance the effectiveness of this mechanism (discussed at section 6.8).

The New South Wales Ombudsman's publication, *Enforcement Guidelines for Councils*, which includes 'a comprehensive model enforcement policy that has been compiled from best practice examples from a number of councils and other relevant agencies'²⁵² could provide a useful starting point for such a strategy.

Bearing in mind the research literature regarding the importance of a credible enforcement peak, the Office's findings, and the views expressed by local governments regarding the effectiveness of the currently available sanctions, the Building Commissioner should also determine whether legislative amendments are required to support the effectiveness of the new enforcement strategy.

²⁵² New South Wales Ombudsman, 'Enforcement Guidelines for Councils', December 2015, p. iii.

Finally, the research literature acknowledges that ‘competent authorities need adequate resources (human, material and financial) to carry out their functions effectively and efficiently’,²⁵³ further identifying that ‘even most skilled experts cannot fulfil their roles without adequate funding and support facilities.’²⁵⁴ Regulatory effectiveness is intrinsically linked to resources, with the literature observing that ‘[one] reason for a lack of enforcement is that the regulator does not have the capability to actually enforce the regime. This capability may not be available because the regulator has insufficient skilled people, inadequate financial resources, [or] ineffective powers’.²⁵⁵ The OECD further identifies funding as a key principle in best practice by regulators, stating:

Funding levels should be adequate to enable the regulator, operating efficiently, to effectively fulfil the objectives set by government, including obligations imposed by other legislation.²⁵⁶

Recommendation 18

Taking into account the findings of the Investigation, the Building Commissioner, in consultation with local governments and other stakeholders:

- (i) develops an evidence-based enforcement strategy to improve compliance with the *Building Act 2011* and the *Building Regulations 2012* for use across local governments, taking into account:
 - a. the resourcing available to local governments to implement the enforcement strategy;
 - b. that any regulatory compliance model is done, as a matter of principle, in a cost-beneficial way, that is, at least cost to local governments (and, by extension, to ratepayers); and
 - c. that costs for inspections represent benchmarked efficient costing that is transparently passed on to pool-owning ratepayers who cause these costs to be incurred rather than subsidised by ratepayers who do not own a swimming pool; and
- (ii) determines whether legislative amendments are required to support the effectiveness of the enforcement strategy and, if so, seeks these amendments.

Recommendation 19

The Building Commissioner, in consultation with local governments and other stakeholders:

- (i) includes the use of re-inspection of barriers to swimming pools that do not initially comply with the *Building Regulations 2012*, as part of an evidence-based enforcement strategy to improve compliance with the *Building Act 2011* and the *Building Regulations 2012* for use across local governments; and
- (ii) if necessary, seeks an amendment to the *Building Regulations 2012* to provide a specific basis for these re-inspections.

²⁵³ United Nations, Economic Commission for Europe, 2nd *Environmental Performance Review: Kazakhstan*, United Nations, Switzerland, 2008, p. 51.

²⁵⁴ United Nations, Economic Commission for Europe, 2nd *Environmental Performance Review: Kazakhstan*, United Nations, Switzerland, 2008, p. 51.

²⁵⁵ Yates, A, *The Nexus Between Regulation Enforcement and Catastrophic Engineering Failures*, Australian Institute of Criminology, Paper presented at the *Current Issues in Regulation: Enforcement and Compliance Conference Convened by the Australian Institute of Criminology*, Melbourne, 2-3 September 2002, p. 5.

²⁵⁶ Organisation for Economic Cooperation and Development, *Principles for the Governance of Regulators: Public Consultation Draft*, Paris, 21 June 2013, p. 13.

Recommendation 20

The Building Commissioner, in consultation with local governments and other stakeholders:

- (i) considers a charge for re-inspection of barriers to swimming pools that do not initially comply with the *Building Regulations 2012*, in an evidence-based enforcement strategy to improve compliance with the *Building Act 2011* and the *Building Regulations 2012* for use across local governments; and
- (ii) if necessary, seeks an amendment to the *Building Regulations 2012* to provide the basis for these charges.

8.5.4 The requirements for swimming pool barriers are available to those who are required to comply with them via the Building Commission's *Rules for Pools and Spas* publication

As identified in Chapter 6, regulation 50(1) of the *Building Regulations 2012* requires owners and occupiers of premises to ensure that a swimming pool barrier is installed or provided around a private swimming pool. As discussed above, the Table of Eleven identifies factors that influence spontaneous compliance, which occurs in the absence of active enforcement.²⁵⁷ The first dimension of spontaneous compliance is 'knowledge of the regulation',²⁵⁸ as follows:

Knowledge of the regulation: *the acquaintance with and clarity of the regulation within the regulatee group.*

Does the regulatee know the rules? Is the regulation not too extensive? What should the regulatee do in order to know the regulation?

Is there a possible doubt (within the regulatee group) about the applicability of the regulation? Does the regulatee understand what is meant by the regulation? Is a certain level of (technical or juridical) expertise necessary to understand the regulation?²⁵⁹ [Original emphasis]

The OECD further identifies that '[p]eople cannot comply with regulations if they do not understand what is required' further suggesting that non-compliance with a regulatory framework can be related to a lack of regulatory knowledge or comprehension by the target group.²⁶⁰

Home owners are likely to be aware through the building permit process that a swimming pool barrier is required when installing a swimming pool (risks associated with swimming pools where the building permit process does not apply, and associated strategies, are discussed in Chapter 9).

²⁵⁷ Organisation for Economic Cooperation and Development, *Better Regulation in Europe: The Netherlands*, OECD, Paris, 2010, p. 109.

²⁵⁸ van der Schraaf, A and Roessen, A, *Incentive framework to comply with regulations*, Paper for the OECD conference on Economic Aspects of Environmental Compliance Assurance Paris, Paris, 2-3 December 2004, p. 4.

²⁵⁹ van der Schraaf, A and Roessen, A, *Incentive framework to comply with regulations*, Paper for the OECD conference on Economic Aspects of Environmental Compliance Assurance Paris, Paris, 2-3 December 2004, p. 4.

²⁶⁰ Organisation for Economic Cooperation and Development, *Reducing the Risk of Policy Failure: Challenges for Regulatory Compliance*, OECD, Paris, 2000, p. 14.

Regulation 50(1) of the *Building Regulations 2012* identifies that the specific requirements that owners are required to comply with when installing or providing a swimming pool barrier are set out in the applicable Australian Standards. The Australian Standards themselves are not freely available, and need to be purchased from SAI Global. At the time of publication of the Australian Standards, prices for the relevant Australian Standards, for personal use, commenced at \$52.18 for an electronic document.²⁶¹ However, the requirements of the relevant Australian Standards have been summarised in the Building Commissioner's *Rules for Pools and Spas*,²⁶² which is available electronically and provides 'a set of guidelines for residential swimming pool owners, pool contractors, fencing suppliers and installers'.²⁶³

Section 150(5) of the *Building Act 2011* specifies that the Building Commission must make the Australian Standards available to the public for inspection at its office:

150. Regulations may refer to published documents

- (1) Regulations made for the purposes of this Act may adopt the text of any published document specified in the regulations —
 - (a) as that text exists at a particular date; or
 - (b) as that text may from time to time be amended.
- (2) The text may be adopted —
 - (a) wholly or in part; or
 - (b) as modified by the regulations.
- (3) The adoption may be direct (by reference made in the regulations), or indirect (by reference made in the text that is itself directly or indirectly adopted).
- (4) The adoption of a text is of no effect unless —
 - (a) the adopted text; and
 - (b) if the text is adopted as it may be amended from time to time, either —
 - (i) the amendments to the text; or
 - (ii) the text as amended,

can at all reasonable times be inspected or purchased by the public.
- (5) The Building Commissioner must ensure that text mentioned in subsection (4)(a) and (b) —

²⁶¹ SAI Global, 'InfoStore: AS 1926.1-1993 Swimming pool safety - Fencing for swimming pools', viewed 12 December 2016, <<http://infostore.saiglobal.com/store/details.aspx?ProductID=252975>>.

²⁶² Government of Western Australia, Department of Commerce, *Rules for Pools and Spas*, Building Commission, Perth, May 2016.

²⁶³ Government of Western Australia, *Rules for Pools' launched*, 16 October 2005, viewed 29 November 2016, <<https://www.mediastatements.wa.gov.au/Pages/Gallop/2005/10/Rules-for-Pools'-launched.aspx>>.

- (a) can be inspected by the public at the Commissioner's office during business hours;
and
 - (b) can be purchased by the public.
- (6) Regulations that adopt the text of a published document may contain provisions that are necessary or convenient for dealing with transitional matters related to the provisions that change or cease to have effect in relation to the text.

The Building Commission informed the Office that the Australian Standards are freely available for viewing during business hours at the new Department of Mines, Industry Regulation and Safety's public library (the Building Commissioner is within the new Department of Mines, Industry Regulation and Safety), located at its office in Cannington. This satisfies the requirements under the *Building Act 2011*. However, the location of the Building Commission office in Cannington, a southern suburb of Perth, raises accessibility issues for owners and occupiers who may seek access to the Australian Standards free of charge and reside in other areas of Western Australia. Accordingly, it may be useful for local governments to provide access to the Australian Standards for members of the public in their districts.

9 Swimming pool barriers that may not be inspected by local governments

During the Investigation, the Office identified that there were certain types, and some locations, of private swimming pools whose barriers may not be, or are not required to be, inspected by local governments. Some of these types of private swimming pools have been the location of fatal and non-fatal drowning incidents in the past or give rise to risks of these incidents in the future. The following types of private swimming pool barriers were identified by the Office as being at increased risk of not being inspected:

- temporary barriers for swimming pools that are in the process of being installed, including swimming pools that need to be filled with water during installation;
- barriers for types of swimming pools that can be constructed without a building permit, particularly portable pools and spas; and
- barriers for swimming pools that have been decommissioned and then filled with water again.

In addition, local governments are only required to inspect barriers for swimming pools in geographical areas of Western Australia where Division 2 of Part 8 of the *Building Regulations 2012* applies.

Accordingly, in addition to examining the inspection of private swimming pool barriers by local governments (discussed in Chapter 6 and Chapter 7), the Office analysed the systemic factors that mean that barriers for these types of private swimming pools may not be, or are not required to be, inspected. The Office's findings are discussed below.

9.1 Temporary barriers for swimming pools that are in the process of being constructed

9.1.1 Legislative requirements²⁶⁴

As discussed in detail in Chapter 6, in Western Australia, regulation 50(1) of the *Building Regulations 2012* requires owners and occupiers to ensure that a private swimming pool with water that is more than 300 mm deep has a barrier that restricts access by young children to the pool and its immediate surrounds, as follows:

50. Barrier to private swimming pool

- (1) Each owner and occupier of premises on which there is a private swimming pool containing water that is more than 300 mm deep must ensure that there is installed or provided around the pool a barrier that restricts access by young children to the pool and its immediate surrounds.

Penalty for this subregulation: a fine of \$5 000.

In addition, Chapter 6 identifies that regulation 50 of the *Building Regulations 2012* also sets out the circumstances in which a barrier to a private swimming pool is considered to

²⁶⁴ As previously noted, Division 2 of the *Building Regulations 2012* does not apply in excluded areas; this is discussed in detail in section 9.2.

be suitable for restricting access by young children to the pool and its immediate surrounds. These requirements involve compliance with AS 1926.1-1993 (for private swimming pools pre-May 2016) or compliance with a Building Code pool barrier requirement (for private swimming pools post-May 2016).²⁶⁵

The Office's review of section 2.1 of AS 1926.1-1993 (which is the standard applicable to the Investigation) identified that it requires that the barrier shall be a permanent structure. The new Australian Standard applicable to post-May 2016 swimming pools (AS 1926.1-2012 Swimming pool safety - Safety barriers for swimming pools), adopted in the Building Code of Australia, continues to require that '[a] barrier shall be a permanent structure'.²⁶⁶

AS 1926.1-1993 does not define a permanent structure. However, AS 1926.1-2012 defines a permanent structure as:

1.3.19 Permanent structure

A barrier, or part of a barrier which cannot be removed without the use of tools.

Legislation also provides for local governments to approve the use of barriers that do not meet the applicable standards in certain circumstances. In relation to barriers for pre-May 2016 private swimming pools (the subject of the Investigation), regulation 50(4) of the *Building Regulations 2012* requires that barriers must be in accordance with either AS 1926.1-1993 or approved 'alternative requirements,' as follows:

50. Barrier to private swimming pool

...

- (4) A barrier to a pre-May 2016 private swimming pool —
 - (a) may consist of a fence, wall, gate or other component, or a combination of them; and
 - (b) any fence, wall, gate or other component that is included in the barrier must be in accordance with —
 - (i) the requirements of AS 1926.1; or
 - (ii) **approved alternative requirements;**and
 - (c) any wall comprising part of the barrier must have no means of access through a building other than —
 - (i) a window that is in accordance with the requirements of AS 1926.1; or
 - (ii) an approved door.

[Emphasis added]

²⁶⁵ Amendments to the *Building Regulations 2012* took effect from 1 May 2016.

²⁶⁶ Building Commission, 'Building Amendment Regulations (No. 2) 2016 (swimming pool barriers)', *Industry Bulletin IB 067/2016*, Department of Commerce, Perth, 2016, p. 5.

Regulation 51(2) further relevantly provides the circumstances in which local governments may approve these 'alternative requirements', as follows:

51. Approvals by permit authority

...

- (2) A permit authority may approve requirements alternative to the requirements of regulation 50(4)(b) if it is satisfied that the alternative requirements will restrict access by young children to the private swimming pool as effectively as if there were compliance with AS 1926.1.

...

If approved by the local government pursuant to regulation 51, the barrier that meets the alternative requirements is referred to as an 'approved barrier solution' as defined in regulation 3, as follows:

3. Terms used

In these regulations —

...

approved barrier solution, in relation to a swimming pool, means an [sic] performance solution used to comply with a Building Code pool barrier requirement that has been approved in accordance with regulation 51 by the permit authority for the swimming pool;

...

The Building Commission has informed the Office that approved barrier solutions are generally sought and granted to enable access to a swimming pool by an owner with a disability. None of the deaths of children reported to the Ombudsman involved temporary barriers that had been approved by local governments as 'an approved barrier solution'. For these reasons, this section focuses on the use of temporary barriers that have not been approved by local governments as approved barrier solutions.

9.1.2 Guidelines

The *Inspector Guidelines* state that a pool that is required to be filled with water during construction must have a compliant safety barrier, either temporary or permanent, before it can be filled with more than 300 mm of water. The *Inspector Guidelines* recognise that:

An empty pool/spa does not require a compliant pool safety barrier until it has at least 300 mm (depth) of water in it (Building Regulations 2012 regulations 3 and 50(1)).²⁶⁷

The *Inspector Guidelines* also provide for swimming pools which are required to be filled with water during construction, noting that these pools must have a compliant safety

²⁶⁷ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 10.

barrier installed, either temporary or permanent, before being filled with more than 300 mm of water, as follows:

A pool that is required to be filled with water during construction (eg a fibreglass pool) must have a compliant safety barrier, either temporary or permanent, installed before the pool can be filled with more than 300 mm (depth) of water. A temporary barrier must not be removed until a permanent complying barrier is installed.²⁶⁸

The *Inspector Guidelines* also recognise that:

Some permit authorities may have specific requirements for temporary barriers.²⁶⁹

In this context, the *Inspector Guidelines* are referring to temporary barriers which, while they are not intended to be the permanent barriers to the swimming pools, still meet the definition of a permanent structure.

9.1.3 Two children died by drowning following an incident in a swimming pool with a temporary barrier

The Office found that, of the 16 children who died by drowning in a private swimming pool, two (13 per cent) children died by drowning following an incident in a swimming pool with a temporary barrier in place. In these instances, temporary barriers were in place because:

- a new fibreglass swimming pool had been constructed, the permanent barrier had not yet been installed and a section of the temporary barrier had been loosened to swing open; and
- an existing swimming pool was undergoing renovations, the existing permanent barrier had been removed and the temporary barrier had been propped open.

The issues raised by these scenarios are discussed further below.

9.1.4 Local governments reported that temporary barriers are used during the construction of swimming pools, particularly fibreglass swimming pools

With respect to fibreglass swimming pools, during the Investigation, the five selected local governments reported that, in practice, as fibreglass swimming pools are filled with water during their construction, a swimming pool may contain more than 300 mm of water during the construction period and permanent barriers are usually not installed until after the swimming pool has been constructed. There is therefore a period of time between the swimming pool being filled with water and the installation of the permanent barrier.

²⁶⁸ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 36.

²⁶⁹ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 36.

This understanding is supported by industry advice, which states as follows:

...the fibreglass swimming pool is then hooked by straps to the crane and lifted off of the truck ... Once the pool has been lowered into the excavation area, it should be pretty close to being level.

...

Simultaneously the fibreglass swimming pool will be filling with water while the backfilling occurs. This is done to ensure equal pressure and maintain stability during the backfilling process.²⁷⁰

The Office observed that this industry advice does not mean there needs to be an extended delay between the construction of a fibreglass swimming pool and the installation of its permanent barrier (which occurred in the deaths notified to the Ombudsman).

9.1.5 Approaches used in other states

The Office reviewed the approaches used in other Australian jurisdictions to ensure that temporary barriers are effective. In New South Wales, in relation to the issues associated with temporary barriers, the Independent Review Discussion Paper identified that:

Clearly, the general principle should be that a temporary fence should adhere to the pool barrier standard; even if it is a structure that is not established on permanent footings and it should be used for the minimum necessary time.²⁷¹

The Queensland Government has similarly specified requirements for temporary fencing, in particular that these fences may not be permanent structures but should otherwise comply with the pool safety standard:

Temporary fencing

...

Under the pool safety standard, a temporary fence means a fence which is not a permanent structure, has at least one gate, otherwise complies with the pool safety standard and is securely fixed to resist reasonably foreseeable actions to which it may be subjected, for example, high winds, collisions etc.²⁷²

The Queensland Government requirements go on to specify that temporary fences should be approved in writing and inspected by a building certifier:

²⁷⁰ Fibreglass swimming pool installation, Leisure Pools, viewed 23 May 2016, <<http://www.leisurepools.com.au/pool-ideas/fibreglass-swimming-pool-installation>>.

²⁷¹ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 34.

²⁷² Queensland Government, Department of Housing, Pool safety inspector guideline, October 2015, viewed 31 August 2016, <<http://www.hpw.qld.gov.au/SiteCollectionDocuments/PoolSafetyInspectorGuideline.pdf>>, p. 31.

In general a temporary fence may be used instead of a permanent barrier for a new pool, for up to three months, provided it is inspected and approved by a building certifier. It may be used for further periods of up to three months with written approval by a building certifier.²⁷³

Section 6.3.5 identifies that the Building Commissioner has a function, pursuant to section 86(b) of the *Building Services (Complaint Resolution and Administration) Act 2011*, to monitor and review the operation of the building service Acts.

Recommendation 21

The Building Commissioner reviews the requirements that are in force in other jurisdictions for temporary barriers, and, informed by cost benefit analysis, explores whether any such requirements should be considered in Western Australia, including those that relate to:

- (i) time limits on temporary barriers; and
- (ii) the need for temporary barriers to be inspected and approved by a building certifier (or equivalent).

9.2 Barriers for types of swimming pools that can be constructed without a building permit, particularly portable pools and spas

The Office found that four of the 16 children who died by drowning in a private swimming pool, drowned following an incident in a swimming pool that could be installed without the involvement of a builder, and therefore a building permit may not have been sought. These four swimming pools included three swimming pools and one spa.

The ACCC has described portable swimming pools, which can include portable spas, as coming in various sizes, shapes and water depths:

Portable swimming pools take several forms and include inflatable pools, pools incorporating a canvas or flexible plastic liner attached to a frame, and hard plastic pools such as wading pools. Depths vary from less than 150mm to over one metre.²⁷⁴

9.2.1 Legislative requirements²⁷⁵

As previously discussed at section 3.3.1, regulation 3 of the *Building Regulations 2012* defines a swimming pool as having ‘the meaning given in the Building Code Volume 1 Part 1A,’ namely:

Swimming pool means any excavation or structure containing water and principally used, or that is designed, manufactured or adapted to be principally

²⁷³ Queensland Government, Department of Housing, Pool safety inspector guideline, October 2015, viewed 31 August 2016, <<http://www.hpw.qld.gov.au/SiteCollectionDocuments/PoolSafetyInspectorGuideline.pdf>>, p. 31.

²⁷⁴ Australian Competition and Consumer Commission, *Portable Pools – Make It Safe*, viewed 19 April 2017, <<https://www.productsafety.gov.au/news/portable-pools-make-it-safe>>.

²⁷⁵ As previously noted, Division 2 of the *Building Regulations 2012* does not apply in excluded areas; this is discussed in detail in section 8.4.

used for swimming, wading, paddling, or the like, including a bathing or wading pool, or spa.²⁷⁶

Regulation 3 of the *Building Regulations 2012* further defines a private swimming pool as follows:

private swimming pool means a swimming pool —

- (a) that is associated with —
 - (i) a Class 1a building; or
 - (ii) less than 30 sole-occupancy units in a Class 2 building; or
 - (iii) a Class 4 part of a building;
- and
- (b) which has the capacity to contain water that is more than 300 mm deep;
- ...

Portable swimming pools and portable spas are within the definition of a private swimming pool set out above. Such pools are therefore subject to the requirements of the *Building Regulations 2012*. In particular, the requirement of regulation 50(1) to ensure that a barrier to a private swimming pool is installed or provided around the swimming pool that restricts access by young children to the pool and its immediate surrounds applies to portable swimming pools that meet the definition of a private swimming pool.

However, section 69 of the *Building Act 2011* requires a building permit to be obtained only for a private swimming pool, including a portable swimming pool or spa, that will remain erected for more than a month, as follows:

69. Temporary buildings

- (1) A permit is not required for a building or an incidental structure that is to remain erected for no longer than one month.
- (2) However, the permit requirement provisions apply to a building or incidental structure of a kind mentioned in subsection (1) —
 - (a) that members of the public normally use; or
 - (b) to which members of the public are permitted access.

Section 3 of the *Building Act 2011* defines an incidental structure as follows:

incidental structure means a structure attached to or incidental to a building and includes —

- (a) a chimney, mast, swimming pool, fence, free-standing wall, retaining wall or permanent protection structure; and

²⁷⁶ Australian Building Codes Board, *National Construction Code 2016: Volume One Building Code of Australia Class 2 to Class 9 Buildings*, February 2016, p. 32.

- (b) a part of a structure;

The implications of these requirements are discussed further below.

9.2.2 Guidelines

The *Inspector Guidelines* state that:

A building permit is required for a portable swimming and spa pool that will remain erected for a period of more than one month (*Building Act 2011* section 69).²⁷⁷

9.2.3 Local governments reported that few portable swimming pools and portable spas are enclosed by a barrier and it is difficult for them to identify if non-compliance is occurring

The five selected local governments reported that it is difficult to identify portable swimming pools or spas within their districts, as a precursor to ensuring that they are inspected. Local governments reported that they will inspect a portable swimming pool if they are informed by owners, neighbours or other parties that a portable swimming pool has been erected.

In relation to these issues, the 138 survey respondents reported that:

- few portable swimming pools and spas are enclosed with a barrier; and
- it is difficult or impossible to determine how many portable swimming pools or spas are located within each local government district and to ensure these types of swimming pools are inspected.

As discussed in detail in Chapter 6, the building permit process provides a mechanism for advising the local government that a swimming pool and its barrier are to be installed, that the barrier has been installed, and that it has been certified as complying with all applicable standards. However, portable swimming pools and portable spas do not necessarily require professional construction by a builder or swimming pool installer, which means that it can fall to owners and occupiers to obtain building permits. However, owners and occupiers may not be aware of the requirement to apply for building permits, may choose not to apply for building permits, or may not intend that their swimming pools will remain in place for more than one month. In each of these cases, the building permit process will not be set in motion. This creates the risk that the local government is not aware that the portable swimming pool exists, the barrier is not installed, the local government's inspection of the barrier is not triggered and, ultimately, instances of non-compliance (that is, the lack of barriers where required) are not identified and rectified.

²⁷⁷ Government of Western Australia, Department of Commerce, Building Commission, *Inspector Guidelines: Private swimming and spa pool*, August 2016, p. 7, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>.

9.2.4 From 30 March 2014, portable swimming pools, including portable spas, were required to contain warning messages and advice that barrier laws apply

The ACCC *Consumer Goods (Portable Swimming Pools) Safety Standard 2013 (the Portable Swimming Pools Standard)* came into effect in Western Australia from 30 March 2014. Product Safety Australia, within the ACCC, states that this standard is mandatory and applies to portable swimming pools (including spa pools) as follows:

The mandatory standard applies to portable swimming pools that are both:

- intended for personal, domestic or household use
- one of the following:
 - an inflatable swimming pool, of any depth
 - a soft-sided swimming pool, of any depth
 - a rigid-sided swimming pool that is not deeper than 300 mm.

The mandatory standard applies to spas, hot tubs or whirlpool tubs that meet the definition above. For example if a spa is inflatable, it is captured by the mandatory standard.²⁷⁸

The ACCC provides the following advice regarding safety labelling required by the Portable Swimming Pools Standard:

Safety labelling

A portable swimming pool and its retail packaging must display a warning message that is:

- permanent
- legible
- of a certain height
- in contrast to the background colour of the packaging
- on front of the package.

If the depth of the portable swimming pool is less than 300 mm, the warning message must include the following statement:

 **'WARNING!**
Children have drowned in portable swimming pools.
Ensure active adult supervision at all times.
Do not leave children unsupervised in or around the pool—keep them within arm's reach.
Empty and store safely after use.'

If the depth of the portable swimming pool is 300 mm or more, the warning message must include the following statement:

²⁷⁸ Australian Competition and Consumer Commission, 'Portable swimming pools', viewed 8 December 2016, <<https://www.productsafety.gov.au/standards/portable-swimming-pools>>.

ⓘ 'WARNING!
Children have drowned in portable swimming pools.
Ensure active adult supervision at all times.
Do not leave children unsupervised in or around the pool—keep them within arm's reach.
Pool fencing laws apply to this pool. Consult your local government authority for fencing requirements!

All portable swimming pools must display this safety sign:²⁷⁹



The new Department of Mines, Industry Regulation and Safety has a role in monitoring compliance with consumer protection legislation including monitoring safety labelling required by the Portable Swimming Pools Standard, described by the (then) Department of Commerce as follows:

Consumer Protection:

- provides information and advice to consumers and traders about their rights and responsibilities;
- helps consumers resolve disputes with traders;
- monitors compliance with consumer protection legislation;
- investigates complaints about unfair trading practices;
- prosecutes unscrupulous traders;
- regulates and licenses a range of business activities; and
- develops, reviews and prepares amendments to legislation that protects consumers.²⁸⁰

²⁷⁹ Australian Competition and Consumer Commission, 'Portable swimming pools', viewed 8 December 2016, <<https://www.productsafety.gov.au/standards/portable-swimming-pools>>.

²⁸⁰ Government of Western Australia, Department of Commerce, Annual Report 2015–16, 2016, viewed 27 April 2017, < https://www.commerce.wa.gov.au/sites/default/files/atoms/files/doc_ar_2015-2016.pdf >, p. 7.

9.2.5 The Department of Mines, Industry Regulation and Safety could take further steps to address the lack of barriers for portable swimming pools and spas

As discussed above, the current regulatory arrangements are predicated upon the need for a building permit. For similar reasons, government agencies in New South Wales have established a Portable Pool Safety Working Group which comprises representatives of the Children's Hospital at Westmead, Sydney Children's Hospital, Australian Medical Association NSW, Royal Life Saving Society NSW, Samuel Morris Foundation, Ambulance NSW, NSW Police, Fair Trading, Local Councils, Local Government and Shires Association of Australia, Swimming Pool and Spa Alliance, Coroner's Office and Kidsafe NSW.²⁸¹ The Portable Pool Safety Working Group has made a number of recommendations for portable pools and spas, as follows:

1. Ongoing education campaign to promote portable pool safety
2. Mandate the registration of portable swimming pools that have a depth in excess of 300 mm at the point of sale
3. Clarify the definition of a spa pool
4. Inclusion of a large warning sign on the bottom of each portable swimming pool that sets out the legal requirements clearly-this would draw to the attention of the pool owner and pool users the requirements for pool safety.²⁸²

Other suggestions, identified in the Independent Review Discussion Paper, include:

- establishing regulatory requirements that purchasers of above ground swimming pools be advised at point of sale of the requirements for barriers; and
- that retailers of the portable pools advise the relevant local government of the address of delivery of an above ground pool.²⁸³

Recommendation 22

The Building Commissioner collaborates with relevant state government agencies, local governments and other stakeholders, through a senior working group or other appropriate mechanism, to develop strategies for ensuring compliance by owners of portable swimming pools and spas with the requirements of the *Building Regulations 2012*, including strategies to:

- (i) ensure owners and occupiers are aware of the requirements of regulation 50(1) of the *Building Regulations 2012*, and how these requirements apply to portable swimming pools and spas; and
- (ii) assist local governments to identify when portable swimming pools and spas may require inspection.

²⁸¹ Kid Health, The Children's Hospital Westmead, *Kids can drown without a sound: final report*, 2013, viewed 23 September 2016, <https://kidshealth.schn.health.nsw.gov.au/sites/default/files/report_inflatable_and_portable_swimming_pool_safety_final.pdf>, p. 6.

²⁸² Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 39.

²⁸³ Lambert, M, *Independent Review of NSW Swimming Pool Barrier Requirements: Discussion Paper*, 2015, viewed 10 August 2016, <<https://www.olg.nsw.gov.au/sites/default/files/Independent-Review-of-NSW-Swimming-Pool-Barrier-Requirements-Discussion-Paper-2015.pdf>>, p. 12.

In the meantime, the current requirements for warning messages on portable swimming pools and their retail packaging could be reinforced by complementary advice and education and point of sale education.

Recommendation 23:

The Department of Mines, Industry Regulation and Safety considers appropriate community education regarding the specific risks of children drowning in portable pools and spas and the need for these portable pools and spas to comply with the *Building Regulations 2012*, including exploring, subject to appropriate consideration of seeking to limit as far as possible costs imposed on business by regulation, opportunities for retailers and suppliers to inform purchasers at the point of sale of the risks of children drowning in portable pools and spas and the need to comply with legislative requirements.

9.2.5.1 Some local governments run ‘Spa Amnesty’ events to encourage owners and occupiers to come forward and receive advice about barriers

Several of the 138 survey respondents reported running ‘Spa Amnesty’ events, in which the local government invites owners and occupiers to come forward and provide information about swimming pools (including spas) that were not previously known to the local government. These events also provide free information and advice on barriers, compliance requirements and inspections while raising awareness about swimming pool safety.

For example, the City of Albany issued the following media release in September 2015:

Spa Amnesty

As a community safety initiative, with the aim to prevent drowning, the City is inviting owners of spas, jacuzzis and outdoor hot tubs to contact the City of Albany if they do not have a safety barrier and/or Building Licence/Permit for their spa, jacuzzi or outdoor hot tub.

This will be an opportunity for residents to receive advice on safety barriers. Drowning is the most common cause of preventable death for children aged 0-5.

There will be no charge for an inspection.

Spas, jacuzzis and outdoor hot tubs require a Building Licence/Permit to ensure that they have been installed safely, have safety barriers, are compliant for electrical and plumbing work, and if in the ground, have the necessary strength to withstand the pressure of the surrounding earth.

If a landowner has a spa, jacuzzi or outdoor hot tub without a Building Permit and/or without a compliant safety barrier they are encouraged to contact City of Albany’s Senior Building Compliance Officer on [telephone number] for advice and assistance.²⁸⁴

²⁸⁴ City of Albany, Media Release, ‘Spa Amnesty’, City of Albany, 18 September 2015, p. 1.

Once the Office's findings and recommendations regarding ensuring compliance with regulations 50(1) and 53(1) of the *Building Regulations 2012* have been considered and acted on, it may be useful for local governments to consider a 'Spa Amnesty' event.

9.3 Barriers for swimming pools that have been drained of water but still have the capacity to contain water that is more than 300 mm deep

9.3.1 Swimming pools that have been drained of water can be refilled without notifying the local government

During the Investigation, the five selected local governments, and other stakeholders who were interviewed, reported that swimming pools may be 'decommissioned' by draining the water from the swimming pool. The 138 survey respondents provided estimates of the number of swimming pools that were decommissioned in 2014-2015, as shown in Figure 53.

Once a swimming pool has been completely drained of water, a barrier is no longer required (since, as per regulation 50(1), barriers are only required for a swimming pool containing water that is more than 300 mm deep). Accordingly, the five selected local governments reported that they do not inspect swimming pools that have been recorded as emptied.

However, owners and occupiers are able to easily refill swimming pools without notifying the local government. Rain can also create a water level above 300 mm. One survey respondent reported that, for these reasons, they maintain a record of this type of swimming pool and conduct random inspections to ensure that the swimming pool has not been refilled without this being recorded by the local government. This is an example of good practice that could be considered for wider adoption by other local governments.

Figure 53: Number of swimming pools that were decommissioned between 1 July 2014 and 30 June 2015, by region

Region	Number of swimming pools decommissioned
Christmas/Cocos (Keeling) Islands	1
Gascoyne	2
Goldfields-Esperance	33
Great Southern	1
Kimberley	15
Metropolitan	1849
Mid-West	314
Peel	105
Pilbara	196
South West	70
Wheatbelt	88
Total	2674

Source: Ombudsman Western Australia

Recommendation 24

The Building Commissioner promotes to local governments the good practice of conducting random inspections of swimming pools that have been recorded as decommissioned to ensure that these swimming pools have not been recommissioned, and therefore require a swimming pool barrier pursuant to regulation 50(1) of the *Building Regulations 2012*.

In order to address the issue of decommissioned swimming pools being refilled, the Queensland Government outlines in its *Guidelines for pool owners and property agents* that, to decommission a swimming pool, the swimming pool structure must be altered so that the swimming pool is incapable of being filled to a depth of 300 millimetres:

There will be occasions where a pool owner will decide that they no longer want a swimming pool and will decommission their swimming pool as an alternative to complying with the pool safety standard. For this to occur, the swimming pool structure must be altered in a way that makes the pool incapable of being filled to a depth of 300 millimetres. For example, the floor of a spa may have holes drilled into the water receptacle component to permit water to drain out, or one side of a swimming pool may be removed. For swimming pools (including portable spa pools) to be decommissioned the work must result in the swimming pool (including portable spa pools) requiring some repairs to render it incapable of holding water to a depth of 300 millimetres.²⁸⁵

²⁸⁵ Queensland Government, Building Industry and Policy, *Guidelines for pool owners and property agents*, 2015, viewed 23 September 2016, <<http://www.hpw.qld.gov.au/SiteCollectionDocuments/GuidelinesForPoolOwnersAndPropertyAgents.pdf>>, p. 9.

9.4 Barriers for swimming pools in areas of Western Australia where parts of the *Building Regulations 2012* do not apply

9.4.1 Legislative requirements

9.4.1.1 Requirements to install barriers

As previously identified, Part 8, Division 2, regulation 50(1) of the *Building Regulations 2012* requires that:

50. Barrier to private swimming pool

- (1) Each owner and occupier of premises on which there is a private swimming pool containing water that is more than 300 mm deep must ensure that there is installed or provided around the pool a barrier that restricts access by young children to the pool and its immediate surrounds.

Penalty for this subregulation: a fine of \$5 000.

Regulation 49 of the *Building Regulations 2012* states that Division 2, including regulation 50, applies to certain local government districts and areas that form part of local government districts, as follows:

49. Application of this Division

This Division applies in respect of a private swimming pool that is located in a local government district specified in column 1 of the Table in Schedule 5 in the area specified for that district in column 2 of that Table.

That is, regulation 49 provides that the requirement for each owner and occupier to install or provide a swimming pool barrier that restricts access by young children to the pool and its immediate surrounds, pursuant to regulation 50(1) only applies to those local government districts as specified in the Table in Schedule 5. Those areas that are not specified are not subject to regulation 50(1) (and are referred to as **excluded areas**).

The Office reviewed the Table in Schedule 5 to identify included and excluded areas and found that, in summary, Part 8, Division 2 applies to the 140 local governments in Western Australia in the following manner:

- sixty seven local governments – whole district;
- fifteen local governments – partial district: only specified areas within the district;
- one local government – no area within the district; and
- for the remaining (currently 57) local governments – all town sites within the district.

Notwithstanding regulation 49, there are other provisions in the *Building Act 2011* and the *Building Regulations 2012*, which set out the requirements for building permits and the applicable building standards for the construction of swimming pools. These requirements, which were discussed in detail in Chapter 6, can be summarised as follows:

- the requirement to obtain a building permit (section 9 of the *Building Act 2011*);

- the requirement for a certificate of design compliance (section 19(3) and (4) of the *Building Act 2011*);
- the requirement to specify inspections (regulation 28 of the *Building Regulations 2012*); and
- the requirement to ensure that the swimming pool barrier, 'when completed', complies with the applicable building standard (section 37 of the *Building Act 2011*).

There is nothing in the *Building Act 2011* or the *Building Regulations 2012* that states that these requirements do not apply to swimming pools being built in excluded areas.

In summary, a private swimming pool constructed in an excluded area needs to have a barrier that is compliant with the applicable building standard under the *Building Act 2011* and the *Building Regulations 2012*. However, this is required indirectly, through the regulatory provisions for building permits, not directly, through the regulatory provisions for barriers.

9.4.1.2 Requirements to inspect barriers

With respect to the inspection of private swimming pool barriers by local governments, regulation 53, which provides the requirement for local governments to do so, is also located in Division 2 of the *Building Regulations 2012*. Accordingly, there is no requirement for local governments to inspect swimming pool barriers in excluded areas. Applying the above regulatory scheme therefore means that there are currently 73 (out of a total of 140) local government districts in which, in whole or in part, local governments are not required to arrange inspections. The Office identified that none of the 16 children who died by drowning, drowned in a private swimming pool located in an excluded area.

9.4.2 Guidelines

The *Inspector Guidelines* state that swimming pools that are located in an excluded area require a compliant swimming pool barrier but do not require a four yearly inspection:

Swimming pools that are not located in a local government district specified in Building Regulations 2012 – column 1 of the Table in Schedule 5, in the area specified for that district in column 2 of that Table, do not require a four yearly inspection, but must still have a compliant pool barrier installed prior to filling with more than 300 mm in depth of water (Building Regulations 2012 regulation 49).²⁸⁶

9.4.3 The Investigation observed the provision of inaccurate advice by some local governments in excluded areas that a swimming pool barrier is not required

As set out above, the current situation in which the direct requirement for a swimming pool barrier (pursuant to regulation 50(1)) does not apply to excluded areas, but the indirect requirement for a swimming pool barrier to be included in a building permit application

²⁸⁶ Government of Western Australia, Department of Commerce, Building Commission, *Private swimming and spa pool inspector guidelines*, August 2016, viewed 31 August 2016, <https://www.commerce.wa.gov.au/sites/default/files/atoms/files/private_swimming_and_spa_pool_inspector_guidelines_-_august_2016_web.pdf>, p. 7.

(pursuant to other sections of the *Building Act 2011* and the *Building Regulations 2012*, discussed above) applies to all areas of Western Australia.

Survey respondents identified that they provide different advice to residents in excluded areas regarding requirements for swimming pool barriers. For example, one of the 138 survey respondents reported that there are a significant number of swimming pools without barriers located on rural living estates within their district. This local government provides advice to residents that there are no provisions for a barrier around swimming pools in excluded areas but it is strongly recommended that one is constructed. While, as discussed above, regulation 50(1) does not apply to owners and occupiers in excluded areas, the *Building Act 2011* and *Building Regulations 2012* still require a compliant barrier to be installed or provided at the time of the swimming pool construction.

The *Swimming Pool Fencing* report (**the Report**), tabled by the Standing Committee on Environment and Public Affairs (**the Committee**) in December 2002, also raises this issue. The Committee refers to the submission by the RLSSA that states:

These regulations [the *Building Amendment Regulations 2002*] provide exemptions for properties within rural areas. RLSSA is not aware of why these areas have been exempt and understands that knowledge of these exemptions is low within local governments.²⁸⁷

The Report summarises the issues that RLSSA (and the Western Australia Local Government Association) ‘... believed need to be addressed’ and includes ‘Exemptions for pools in rural areas needs (sic) to be reviewed’.²⁸⁸

The Committee also made Recommendation 6 which states:

The Committee recommends that the Government have the new home swimming pool advisory group initiate among other things:

...

(h) review requirements for swimming pools in regional areas...²⁸⁹

Recommendation 25

The Building Commissioner considers an amendment to the *Building Regulations 2012* to remove excluded areas so that regulation 50(1) of the *Building Regulations 2012* applies to all owners and occupiers of premises throughout Western Australia. Alternatively, if such an amendment is not considered appropriate, the Building Commissioner works with relevant local governments in excluded areas to provide accurate advice regarding the need to provide swimming pool barriers as part of the relevant building permit.

²⁸⁷ Standing Committee on Environment and Public Affairs, *Swimming Pool Fencing*, December 2002, p. 35.

²⁸⁸ Standing Committee on Environment and Public Affairs, *Swimming Pool Fencing*, December 2002, pp. 10-11.

²⁸⁹ Standing Committee on Environment and Public Affairs, *Swimming Pool Fencing*, December 2002, p. iv.

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Appendix 1: Number of recorded private swimming pools in Western Australia²⁹⁰

Local government	Total number of recorded swimming pools	Total population	Total number of dwellings	Total district area (sq km)
Albany	155	36,262	15,893	4,310
Armadale	4,794	75,000	28,426	560
Ashburton	528	10,001	2,589	105,647
Augusta-Margaret River	116	13,000	9,056	2,138
Bassendean	767	14,600	6,588	11
Bayswater	2,593	61,262	27,822	33
Belmont	1,177	40,083	17,545	40
Beverley	17	1,755	764	2,310
Boddington	53	2,226	828	1,900
Boyup Brook	13	1,738	820	2,838
Bridgetown-Greenbushes	41	4,513	2,263	1,691
Brookton	11	964	502	1,626
Broome	1,446	14,997	8,153	56,000
Broomhill-Tambellup	24	1,214	544	2,810
Bruce Rock	6	974	563	2,772
Bunbury	1,412	31,348	13,911	66
Busselton	1,250	34,290	14,258	1,454
Cambridge	3,103	28,000	11,180	22
Canning	6,186	96,383	32,343	65
Capel	922	16,447	5,955	554
Carnamah	13	550	291	2,835
Carnarvon	152	6,800	2,575	53,000
Chapman Valley	94	1,174	434	4,007
Chittering	389	4,966	2,081	1,220
Christmas Island	2	1,500	627	35
Claremont	733	9,605	4,598	5
Cockburn	6,688	101,973	36,647	170
Cocos (Keeling) Islands	2	572	172	14
Collie	318	9,692	3,943	1,685
Coolgardie	75	5,800	1,673	30,400
Coorow	25	1,200	880	4,137
Corrigin	17	1,063	620	3,095
Cottesloe	612	8,182	3,750	4

²⁹⁰ The Ombudsman's investigation has provided a snapshot of all recorded private swimming pools in Western Australia as at 30 June 2015.

Local government	Total number of recorded swimming pools	Total population	Total number of dwellings	Total district area (sq km)
Cranbrook	13	1,173	802	3,390
Cuballing	28	894	368	1,250
Cue	1	320	200	13,716
Cunderdin	15	1,390	575	1,872
Dalwallinu	44	1,350	693	7,187
Dandaragan	Unknown	3,600	3,085	6,934
Dardanup	727	1,400	5,716	518
Denmark	25	5,800	3,314	1,860
Derby-West Kimberley	106	8,941	3,008	118,560
Donnybrook-Balingup	161	5,750	2,354	1,541
Dowerin	8	705	410	1,867
Dumbleyung	9	605	354	2,553
Dundas	6	1,141	527	92,725
East Fremantle	526	7,462	3,050	3
East Pilbara	373	12,581	2,873	371,696
Esperance	107	13,477	6,460	44,500
Exmouth	87	2,487	1,089	6,261
Fremantle	190	30,321	13,464	19
Gingin	241	5,054	1,625	3,223
Gnowangerup	11	1,307	795	5,000
Goomalling	13	1,013	574	1,845
Gosnells	7,278	121,252	42,454	127
Greater Geraldton	1,747	40,448	15,659	9,889
Halls Creek	-	4,031	1,070	143,025
Harvey	1,475	26,975	10,108	1,766
Irwin	168	3,780	1,660	2,223
Jerramungup	-	1,232	886	6,540
Joondalup	21,552	167,623	58,524	96
Kalamunda	6,290	59,716	22,415	324
Kalgoorlie-Boulder	2,341	32,620	15,933	95,229
Karratha	1,658	25,907	8,944	15,196
Katanning	116	4,183	1,904	1,523
Kellerberrin	23	1,181	561	1,852
Kent	2	601	340	6,552
Kojonup	86	1,982	823	2,937
Kondinin	7	1,200	485	7,340
Koorda	25	487	295	2,662
Kulin	8	826	441	4,790
Kwinana	1,645	35,000	13,496	118
Lake Grace	11	1,361	754	11,890

Investigation into ways to prevent or reduce deaths of children by drowning

Local government	Total number of recorded swimming pools	Total population	Total number of dwellings	Total district area (sq km)
Laverton	2	1,225	163	183,198
Leonora	6	2,510	696	31,743
Mandurah	4,423	80,683	37,303	174
Manjimup	57	9,183	4,931	7,028
Meekathara	-	1,377	284	100,733
Melville	9,640	106,335	40,111	53
Menzies	-	353	96	128,353
Merredin	104	3,246	1,310	3,372
Mingenew	-	487	242	1,927
Moora	104	2,476	1,430	3,788
Morawa	4	950	416	3,528
Mosman Park	746	8,600	4,000	4
Mount Magnet	-	690	465	13,877
Mount Marshall	Unknown	481	361	10,134
Mukinbudin	5	490	315	3,413
Mundaring	3,450	38,108	13,855	644
Murchison	Unknown	112	67	49,500
Murray	1,185	15,988	7,360	1,821
Nannup	35	1,284	770	2,953
Narembeen	14	812	435	3,821
Narrogin (Shire)	20	900	369	1,618
Narrogin (Town)	134	4,500	1,949	13
Nedlands	2,590	22,144	8,490	21
Ngaanyatjarraku	Not provided	1,437	482	159,948
Northam	500	10,557	4,387	1,443
Northampton	124	3,192	2,282	12,499
Nungarin	-	300	134	1,145
Peppermint Grove	262	1,705	602	1
Perenjori	6	903	309	8,214
Perth	81	21,860	10,975	8
Pingelly	34	1,163	546	1,223
Plantagenet	17	5,116	2,490	4,875
Port Hedland	866	20,000	5,859	11,844
Quairading	51	1,022	503	2,040
Ravensthorpe	-	1,800	1,200	12,872
Rockingham	8,652	120,275	46,862	261
Sandstone	-	111	52	32,889
Serpentine-Jarrahdale	1,681	23,680	7,609	905
Shark Bay	7	984	485	25,000
South Perth	2,157	46,113	22,065	20
Stirling	10,499	223,307	88,000	105

Investigation into ways to prevent or reduce deaths of children by drowning

Local government	Total number of recorded swimming pools	Total population	Total number of dwellings	Total district area (sq km)
Subiaco	706	19,693	8,504	7
Swan	3,773	124,042	46,000	1,044
Tammin	-	400	222	1,087
Three Springs	8	700	378	1,927
Toodyay	72	4,686	2,286	1,693
Trayning	2	467	242	1,632
Upper Gascoyne	1	380	130	46,602
Victoria Park	697	37,682	14,503	18
Victoria Plains	15	931	510	2,563
Vincent	559	31,549	18,557	11
Wagin	71	1,844	909	1,950
Wandering	16	438	220	1,955
Wanneroo	10,006	179,813	64,324	684
Waroona	148	4,200	1,874	835
West Arthur	2	868	491	2,850
Westonia	Not provided	277	128	3,268
Wickepin	4	733	421	1,989
Williams	9	1,039	472	2,295
Wiluna	1	1,241	367	184,000
Wongan-Ballidu	24	1,511	603	184,000
Woodanilling	6	420	201	1,126
Wyalkatchem	17	523	332	1,743
Wyndham-East Kimberley	260	6,952	4,926	121,189
Yalgoo	-	419	86	33,258
Yilgarn	27	1,636	809	30,720
York	162	3,396	1,838	2,010
Grand Total	144,899	2,487,609	995,975	2,745,516

Source: Ombudsman Western Australia and *The Western Australian Local Government Directory 2016*²⁹¹

²⁹¹ Western Australian Local Government Association, *The Western Australian Local Government Directory 2016*, Western Australian Local Government Association, West Leederville, 2016.

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ISBN (Print): 978-0-6482005-0-5

ISBN (Online): 978-0-6482005-1-2

First published by Ombudsman Western Australia on 23 November 2017.

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