



Child Accident Prevention Foundation of Australia
Western Australia

Education & Care Guide to Play

Partner



Government of Western Australia
Department of Health

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Purpose of this Guide

The aim of this guide is to outline a minimum level of safety within the play areas at Education and Care centres. It is designed to be used as a tool to help educators create safer environments for children. It will enable educators to:

- Establish a minimum level of safety for the centre play areas
- Identify potential hazards so that they can be controlled to reduce the risk of injury
- Conduct Risk Assessments and Risk Benefit Assessments
- Have a basic level of understanding of the Australian Standards for Playgrounds
- Understand the benefits of nature play and how to incorporate it into play areas

Introduction

Kidsafe WA

Kidsafe WA is the leading independent not-for-profit organisation dedicated to promoting safety and preventing childhood injuries and accidents in Western Australia. Injuries are the leading cause of death in Australian children aged one to fourteen, accounting for nearly half of all deaths in this age group. More children die of injury than die of cancer, asthma and infectious diseases combined. Many of these deaths and injuries can be prevented. Kidsafe WA works in the community to educate and inform parents and children on staying safe at home, at play and on the road.

Play @ Kidsafe WA

Play @ Kidsafe WA provides a range of services to help create and maintain play spaces that support children's development, learning, health and wellbeing while reducing the risk of serious injury. We recognise the importance of play as a vital part of childhood that helps children develop knowledge, skills, physical strength, coordination and balance. Our Play Advisers have a range of qualifications and experience and have worked with education and care, schools, community groups and local government over many years. They are accredited Playground Inspectors, who are independent of and not affiliated with any playground manufacturer or retailer.

Services We Provide

Consultation Services

- Simple information can be provided by phone and email or a Playground Consultant can visit your playground to discuss safety and design ideas to enhance children's play and learning.

Playground Inspections

- Our accredited Playground Inspectors can inspect your playground for compliance against the Australian Standards and provide a written report with prioritised recommendations.

Review of Plans

- We can review your plans and provide a written report outlining any non-compliance or safety issues. A great idea before the building and construction starts.

Playground Inspection & Maintenance Workshops

- These workshops cover what to look for when checking playgrounds for safety hazards and how to check for compliance with the Australian Standards. Alternatively, we can tailor a workshop to meet your needs.

Nature Play Workshops

- Nature play workshops cover ways to create playspaces that support children's development, learning and wellbeing and provide opportunities for them to explore and connect with nature in a safe environment. Workshops can include strategies to meet outcomes of the Early Years Learning Framework.

Registered Training

- Kidsafe WA is a Registered Training Organisation (National Provider Number 52376). We are registered with the Australian Skills Quality Authority (ASQA) to deliver nationally recognised training in all Australian states and territories. We offer the following registered training courses:
 - AHCPGD212 Conduct Visual Inspection of Park Facilities
 - AHCPGD311 Conduct Operational Inspection of Park Facilities
 - AHCPGD510 Conduct Comprehensive Inspection of Park Facilities

Education and Care

The term Education and Care covers a diverse range of formal and informal care providers for children including centre-based care such as long day care, outside school hours and occasional care as well as family day care. For the purpose of this guide Education and Care refers to long day care centre-based services that offer professional care for children aged 0-6 years.



National Quality Framework

The National Quality Framework is a quality standard to improve education and care across long day care, family day care, preschool, kindergarten, and outside school hours care services. It is in place to improve children's education and care services across Australia.

The framework in Western Australia is comprised of the:

- National Law and Regulations
- National Quality Standard
- Assessment and Quality Rating Process
- National Learning Frameworks
- Approved Learning Frameworks
- Early Years Learning Frameworks
- Framework for School Age Care

National Law and Regulations

The National Law and National Regulations outline the legal obligations of education and care services, approved providers, nominated supervisors and educators. They explain the powers and functions of the state and territory regulatory authorities and ACECQA. In Western Australia the following law and regulations apply:

- Education and Care Services National Law (WA) Act 2012
- Education and Care Services National Regulations 2012

This guide refers specifically to the following regulations:

Part 4.3	Physical Environment
103. Premises, furniture and equipment to be safe, clean and in good repair	The approved provider of an education and care service must ensure that the education and care service premises and all equipment and furniture used in providing the education and care service are safe, clean and in good repair.
104. Fencing	The approved provider of an education and care service must ensure that any outdoor space used by children at the education and care service premises is enclosed by a fence or barrier that is of a height and design that children preschool age or under cannot go through, over or under it.
105. Furniture, materials and equipment	The approved provider of an education and care service must ensure that each child being educated and cared for by the education and care service has access to sufficient furniture, materials and developmentally appropriate equipment suitable for the education and care of that child.
108. Space requirements - outdoor space	The approved provider of an education and care service must ensure that, for each child being educated and cared for by the service, the education and care service premises has at least 7 square metres of unencumbered outdoor space.
113. Outdoor space - natural environment	The approved provider of a centre-based service must ensure that the outdoor spaces provided at the education and care service premises allow children to explore and experience the natural environment. Example for this regulation: The use of natural features such as trees, sand and natural vegetation.
114. Outdoor space - shade	The approved provider of a centre-based service must ensure that outdoor spaces provided at the education and care service premises include adequate shaded areas to protect children from overexposure to ultraviolet radiation from the sun.
115. Premises designed to facilitate supervision	The approved provider of a centre-based service must ensure that the education and care service premises (including toilets and nappy change facilities) are designed and maintained in a way that facilitates supervision of children at all times that they are being educated and cared for by the service, having regard to the need to maintain the rights and dignity of the children.

National Quality Standards

The National Quality Standard sets a national benchmark for the quality of education and care services and includes seven quality areas that are important to outcomes for children. This guide refers specifically to the following Quality Areas:

QA 2	Children's health and safety
2.1 Health	Each child's health and physical activity is supported and promoted
2.1.3 Healthy Lifestyle	Healthy eating and physical activity are promoted and appropriate for each child
2.2 Safety	Each child is protected
2.2.1 Supervision	At all times, reasonable precautions and adequate supervision ensure children are protected from harm and hazard.
QA 3	Physical Environment
3.1 Design	The design of the facilities is appropriate for the operation of a service.
3.1.1 Fit for Purpose	Outdoor and indoor spaces, buildings, fixtures and fittings are suitable for their purpose, including supporting the access of every child.
3.1.2 Upkeep	Premises, furniture and equipment are safe, clean and well maintained.
3.2 Use	The service environment is inclusive, promotes competence and supports exploration and play-based learning.
3.2.1 Inclusive Environment	Outdoor and indoor spaces are organised and adapted to support every child's participation and to engage every child in quality experiences in both built and natural environments.
3.2.2 Resource Support Play-based Learning	Resources, materials and equipment allow for multiple uses, are sufficient in number, and enable every child to engage in play-based learning.

Assessment and Quality Rating Process

Education and care services are assessed and rated by their state and territory regulatory authority. The authority in Western Australia is the Department of Communities, Education and Care Regulatory Unit. Education and Care services are assessed against the seven quality areas of the National Quality Standard.

National Learning Frameworks

Education and care services are required to base their educational program on an approved learning framework. This should focus on addressing the developmental needs, interests and experiences of each child, while taking into account individual differences. Belonging, Being and Becoming: The Early Years Learning Framework for Australia (EYLF) is the approved learning framework for children birth to five years of age and the framework for School Aged Care. This guide refers specifically to the following practice pedagogy:

Learning Environments

Outdoor learning spaces are a feature of Australian learning environments. They offer a vast array of possibilities not available indoors. Play spaces in natural environments include plants, trees, edible gardens, sand, rocks, mud, water and other elements from nature. These spaces invite open-ended interactions, spontaneity, risk-taking, exploration, discovery and connection with nature. They foster an appreciation of the natural environment, develop environmental awareness and provide a platform for ongoing environmental education.

For more information about the National Quality Framework and related documents visit: <https://www.acecqa.gov.au/nqf/about>.

Injury Stats

Injury is the leading cause of death of children aged between 0 and 14 in Australia, as well as a major cause of hospitalisation. In Western Australia, over 27 children die each year from preventable injuries, whilst a further 7,000 are hospitalised. The majority of childhood injuries are due to unintentional circumstances.

Play is a vital part of childhood. It is a way for children to explore and learn, allowing them to develop essential physical, cognitive and emotional skills. Playgrounds are common areas for children to play and when compared to other settings, are considered to be a safe environment as they are generally away from traffic and other hazards which can be found outdoors.

The number of injuries occurring on playgrounds is relatively small in comparison to other injury concerns. Between 2015 and 2020 an average 1050 children per year presented to the Perth Children's Hospital Emergency Department with an injury that occurred on a playground.⁶

Children aged between five and nine years are at greater risk of injuring themselves on a playground. This accounts for half of all presentations, with a peak in playground injuries seen in children around five years of age. Children under five are also at risk, accounting for just over a third of playground injuries. There is minimal gender variation between male and female children, with both equally as likely to be injured on playground equipment.

Falls are the most common cause of playground related injury, accounting for three quarters of injuries. Falls can be from the same level or from a height. Falls from heights over one metre are more likely to result in severe injuries that may require hospitalisation. Collision based injuries are the second most frequent cause of injury on playgrounds.

Trampolines are the most common piece of playground equipment associated with playground injury accounting for 47.3 percent of injury. This is followed by monkey bars, slides and swings. Trampoline and swing related injuries most commonly occur within the home environment, while monkey bar related injuries most commonly occur at schools.



48.7%



19.3%



14.5%



10.7%

Nearly half of all playground injuries seen at the PCH ED are diagnosed as a fracture. Other common diagnoses include sprains and strains, lacerations, bruising and head injuries.

It is important to find a balance between risks within playgrounds and the benefit they have towards a child's development. To do this playgrounds should be designed, installed and maintained to minimise hazards that could cause potential serious injuries. Injuries within the playground can be attributed to both behavioural and environmental factors including:

- Lack of appropriate adult supervision
- Use of equipment not suitable to the age or stage of development of the child
- Inappropriate use of equipment
- Over-crowding
- Poor design or layout of equipment
- Lack of maintenance

Importance of Play

Playing outside is not just about letting off steam. It is a vital part of childhood that helps children develop physical strength, coordination and balance. It can also provide opportunities for children to learn and develop:

- **Social skills** - when they play with other children they learn to communicate, share, collaborate and empathise with others.
- **Imagination and creativity** - outside play is often open-ended and children need to be creative about what and how games are played.
- **Thinking and problem solving skills** - as children assess risks and tackle new challenges they learn about having a go, persistence and perseverance and the success those attributes can bring.
- **Sense of self** - as they master new skills and play with other children they improve their competence and confidence in their own physical and social abilities.
- **Sense of connection** - to place, to peers and to their local community and environment.
- **Self-care skills** - managing physical and social challenges helps children to learn about keeping themselves safe.

To support these broad learning outcomes, play spaces should include areas for active, free, quiet, social, imaginative, creative, exploratory and natural play. By inviting children to use their own initiative, explore possibilities and take chances we can provide them with opportunities to learn.



Active & Free Play Areas

Fixed equipment offering swinging, sliding, climbing, hanging, balancing and jumping options fit in the active area. Boulders, rocks and logs can also be used for climbing, balancing and jumping. Free play areas include open grassed spaces and slopes for running, informal ball games, cartwheels, somersaults and rolling. A good rule of thumb is to have one third of the playspace as free open space.



Quiet Areas

Quiet areas allow an individual child or small group of children to read, talk, play a special game, interact with nature, or quietly observe other children at play before attempting to join in. Use landscaped plantings to create semi-enclosed spaces and remember to incorporate shelter and seating. Many children are hesitant to join large groups of busy, active children or enter large open play areas. Including quiet areas in the playground gives these children a safe space while they build up confidence.



Social Play Areas

Social play area include space or structures that support social play. These encourage language and cooperation skills as children role-play and learn to take turns and share. Including suggestive structures, rather than obvious shops and cubbies encourages creativity and imagination to use them in a variety of ways.



Imaginative, Creative, Exploratory & Natural Play Areas

These are often the most neglected areas in children's play spaces. They can be inexpensive and offer a wide variety of play options. Trees, shrubs and ground covers can provide different scents, textures, shapes, colours and sounds and help stimulate imaginative and creative play. They can also encourage bugs, birds and other wildlife into the environment and add to the diversity and learning opportunities. Boulders, rocks and logs can be used as play settings and for seating. Wind chimes/socks or other musical elements add further diversity.



Australian Standards for Playgrounds

The Australian Standards for Playgrounds have been developed to provide guidelines for the design, installation, maintenance and operation of playgrounds. They are not intended to provide totally risk free environments.

Australian Standards are a minimum benchmark. They are not mandatory unless referenced in legislation or regulation. The Australian Standards for Playgrounds should be consulted by anyone planning, designing, building or maintaining a playground.

AS 4685

AS 4685 sets out the general and specific requirements for playground equipment.

AS 4685.0: Development, installation, inspection, maintenance and operation

AS 4685.1: General safety requirements and test methods

AS 4685.2: Particular safety requirements and test methods for swings

AS 4685.3: Particular safety requirements and test methods for slides

AS 4685.4: Particular safety requirements and test methods for runways

AS 4685.5: Particular safety requirements and test methods for carousels

AS 4685.6: Particular safety requirements and test methods for rocking equipment

AS 4685.11: Particular safety requirements and test methods for spatial networks

AS 4422

Playground Surfacing - Specifications, Requirements & Test Methods

AS 1428.3

Design for Access and Mobility - Requirements for Children and Adolescents with Physical Disabilities

AS/NZS ISO 31000

Risk Management - Principles & Guidelines

AS 4989

Trampolines - Safety Aspects

AS3533.4.2: Amusement Rides and Devices

Part 4.2 Specific Requirements - Contained Play Facilities



For more information:

To purchase a copy of the *Australian Standards for Playgrounds* visit: www.standards.org.au.

To purchase a copy of Kidsafe WA's companion tool *Kidsafe WA Guide to Playground Standards* visit: www.kidsafewa.com.au/professional-resources-1.

For assistance with interpretation and use of the Australian Standards for Playgrounds contact Play @ Kidsafe WA.

Common Terminology

The following terminology is commonly used within the current Australian Standards for Playgrounds.

Cluster

Two or more separate pieces of equipment designed to be installed in close proximity to each other to provide continuity in a sequence that is needed for the play activity, e.g. trail of stepping stones.

Competent Person

A person who has acquired through training qualifications or experience or a combination of these, the knowledge and skills enabling that person to perform a specified task.

Equipment Easily Accessible

Requiring only basic skills to access the equipment, allowing users to move freely and quickly onto/within the equipment.

Equipment Not Easily Accessible

This type of equipment provides a greater deal of challenge to access the equipment. Often used to 'design out' smaller children from accessing the equipment.

Free Height of Fall (FHoF)

The greatest vertical distance from the intended body support to the impact area below. For example, the intended body support of a platform is a user's feet. The Free height of fall is then measured from the platform to the surface below. Risk of serious injury is minimised where fall heights are reduced.

Impact Area

The impact area is the surface that can be hit by a user falling from the equipment. The extent of the impact area shall be measured from a point directly below the elevated part of the equipment. A graded system of impact areas for specific FHoF, equipment and surfacing types has been introduced. For example, equipment that involves movement requires a larger impact area.

Impact-Attenuating Surfacing (IAS)

A surface, whereby the kinetic energy of an impact is dissipated by localised hysteresis, deformation or displacement such that the maximum acceleration and head injury criteria is reduced and the head injury criteria duration is increased. Often called softfall or undersurfacing.

Loose-Fill Material

Surfacing material supplied for the purpose of impact attenuation in playgrounds, consisting of unbound, granular, chipped or fibrous elements such as sand, wood fibre, bark mulch, wood chips or other materials. These may be organic or inorganic.

Moveable Play Equipment

A range of purpose-made manufactured equipment used in education and care services that is not permanently fixed in place and can be adjusted and moved by educators on a regular basis to vary play opportunities.

Nature Play

The elements of a playground consisting of natural, non-manufactured items that are incorporated into the playground, including items such as logs, boulders, plant materials and surfaces, changes of level and other landscape elements.

Other Settings

This describes the age group after Supervised Early Childhood. Often throughout the standards fall heights are categorised into sections such as Supervised Early Childhood (SEC) and Other Settings.

Playground

An area designed for children's play, including the site, natural features, built landscape, and any manufactured equipment and surfacing.

NOTE: This does not include domestic playgrounds, nor sites and equipment intended for use in formal sport. It does not include fitness equipment unless these items are integrated into the playground along with other play equipment.

Playground Equipment

Equipment and structures, including components and constructional elements with, or on which, children can play outdoors or indoors. This can be individual play or in groups, according to their own rules or own reasons for playing which can change at any time.

Risk Assessment

The identification, evaluation, and estimation of the levels of risks involved in a situation and the likelihood of its occurrence, its comparison against benchmarks or standards, and the determination of an acceptable level of risk.

Risk Benefit Assessment

A tool to aid risk management that explicitly brings together consideration of the benefits as well as the risks of play in a single judgement.

Shall

Indicates that a requirement is mandatory.

Should

Indicates a recommendation.

Supervised Early Childhood Services (SECS)

A defined play space used by an education and care service or children's services, for children under school age, which is supervised by educators.

Undersurfacing

For any equipment that has a free height of 600mm or more, Australian Standards recommend that the fall zone under-surfacing must meet certain minimum impact attenuating requirements. The two main types of materials that comply are loose-fill and synthetic/rubber materials. Loose fill materials include suitable sand or mulch that is well drained, regularly checked, and raked / aerated to avoid compaction and replenished as required to maintain minimum depth. Kidsafe WA recommends a minimum depth of 300mm to allow for displacement during typical use.

Synthetic/rubber materials include wet pour rubber or synthetic grass. Surfaces should be free of trip hazards and checked periodically to ensure there is no deterioration (eg. sub surface bumps or dips). You should also ask the provider for a certificate of compliance with Australian Standards.

Unitary Surfacing

An impact-attenuating surface consisting of one or more material components (such as shredded rubber bound together with urethane) formed into a sheet, tile or other continuous surface where the underlying protective properties of the impact surfacing changes little with consecutive and/or repeated use. Commonly called rubber soft fall/undersurfacing.

Upper Body Equipment

Playground equipment, or part of the equipment, from which suspension is intended using the hand/s without foot support, monkey bars, parallel bars, turning or somersault bars, horizontal ladders, jungle gyms, track rides and other suspended style equipment (excluding fireman's poles, cable ways (flying foxes), rope or chain structures and spatial networks).

Playground Hazards

Most playground injuries can be prevented or their severity reduced by good planning, design and maintenance and risk management planning to avoid playground hazards. It is important to note that the Australian Standards for playgrounds recognise that children need opportunities to experience risk and challenge in playgrounds and focus on the elimination of hazards likely to cause serious life threatening injuries. The standards do not advocate risk-free playgrounds.

Age Appropriate Activities

Children of different ages (or the same age) can have very different physical skills. It is important to ensure your playground includes graduated levels of risk and challenge or that you provide different playground activities for younger and older children.

Entrapment & Pinch Points

There must be no gaps in which a child could become trapped, especially by the head, neck or chest. Gaps that might trap limbs, hands, fingers, hair and clothing should also be avoided. Ensure there are no moving parts that might create crush or pinch points and that any timber is well maintained to avoid splits and splinters.

Equipment Not Recommended

Boat swings, maypoles and plank swings are extremely hazardous because of their design and all have the potential to cause death or serious injury. Kidsafe WA recommends that if any of these items are present in your playground they should be immediately removed.



Boat Swing



Maypole



Plank Swing

Guardrails and Barriers

Guardrails with vertical rails or solid barriers must be installed on platforms more than 600mm above the ground to prevent children from falling.

Maintenance

It is important that a regime of regular maintenance checks and annual comprehensive audit inspections is maintained. Similarly, it is important to keep accurate records of these checks and inspections and any repairs or modifications undertaken.

Protrusions and Catch Points

Playground equipment should not contain any bolts, nails, screws or other elements that might cut, pierce or bruise, or act as a hook to entangle children's clothing or hair. Similarly, ensure any ropes are secured at the top and bottom so they cannot form a loop or noose.

Space and the Flow of Play

Playgrounds typically involve lots of movement. Allow sufficient space for children to move freely about the playground and use the equipment safely. Another important point to consider is any potential clash between active and passive play pursuits. A good design and layout will ensure the flow of children moving through the space matches the different activities children might be participating in.

Supervision

We encourage adult supervision that is appropriate for the age of the children and the activity they are participating in. Young children in particular need close supervision and guidance. Another strategy is to maintain clear lines of sight, so adults can maintain discrete supervision where appropriate.

Trip Hazards

Keep paths and walkways even and clear of tree roots, stumps or rocks unless these are used to provide a balance activity and embedded within an appropriate space. Avoid any edging or curbing that might create a trip hazard and ensure all concrete footings are well below the ground and any surfacing material.



Identifying Hazards and Determining Risks

What is a hazard?

A hazard is defined as anything that has the potential to cause harm. A hazard may be a substance, a piece of equipment, a work procedure, or in the education and care sector, a child's condition. Some other examples include:

- chemical hazards, such as cleaning materials and disinfectants
- broken toys and play equipment
- handling and moving equipment and children
- unsupervised children
- suitable fencing that complies with Regulation 104

What is a risk?

Risk is defined as the chance or likelihood that harm will occur from the hazard. The likelihood is described as 'the expectancy of harm occurring'. It can range from 'never' to 'certain' and depends on a number of factors.

Most playground injuries can be prevented or their severity reduced by good planning, design and maintenance to avoid playground hazards. The prevention of serious injury is an important consideration in playground provision. However, safety considerations also need to be balanced with children's needs for play, learning and fun in the playground.

There is a growing body of research that highlights the benefits for children when play environments provide risk and challenge. There is also corresponding evidence of negative outcomes when children are not given such opportunities; and that striving for 'risk free' playgrounds can actually diminish learning and development opportunities.

Playgrounds can also help children to learn about themselves - their strengths, abilities, achievements and their limitations; and about how to assess risk, problem solve, communicate, collaborate and get along with others.

It is important to note that the Australian Standards for playgrounds recognise that children need opportunities to experience risk and challenge in playgrounds and the standards focus on the elimination of hazards likely to cause **serious life threatening injuries**. The standards do not advocate 'risk free' playgrounds.

Risk Assessment

The latest addition to the AS 4685 Playground Standard is addressing Risk Assessments. Part 0 focusses on the development, installation, inspection, maintenance and operation of Playgrounds. Often when checking playgrounds for safety and compliance we see items that do not 'sit' under a certain standard. It is far easier to Risk Assess these items and ascertain the likelihood of any potential serious injury occurring.

AS 4685.0 defines a Risk Assessment as the identification, evaluation, and estimation of the levels of risks involved in a situation and the likelihood of its occurrence, its comparison against benchmarks or standards, and determination of an acceptable level of risk. There are many risk matrix's available to help you determine the risk of any given activity or piece of playground equipment. A health and safety risk assessment aims to identify and manage hazards that may pose a threat to the health, safety and wellbeing of children or the delivery of education and care. It involves:

- identifying hazards
- assessing the likelihood of the hazard posing a risk and to whom
- estimating the severity of the consequences
- developing an action plan to eliminate the hazard or minimise its effect through control measures

Conducting risk assessments allows educators to consider what could go wrong, to whom and the possible consequences allowing control of a situation before accidents or ill health occur. Some questions to ask/address in conducting an assessment are; who is at risk, how can they be harmed? What is the likelihood of injury or harm? What are the consequences of injury or harm? The consequences could range from 'trivial' to severe or even fatal – for example, from a scratch to death.

The most severe hazards need the most urgent attention. Decide whether the existing precautions are adequate or whether more should be done. It is important to record your findings and to review your assessment and revise it if necessary. A review must always take place when situations change – such as the introduction of new equipment, a change in use of a room, or a child with additional needs starting at your workplace. You must also audit control measures regularly to ensure that they are working correctly.

The risk severity matrix can be used to communicate a common quantified understanding of risk exposure across your centre. The way the risk levels are set and the decision rules assigned to them should be aligned with the organisations risk appetite. The following is an example of a risk assessment technique that may be used by a centre that maintains and operates a playground. For each specific risk the likelihood and consequences are assessed and estimated using the following indicators.

Likelihood of an injury is rated as:	
Rare (highly unlikely event)	1
Unlikely (conceivable event)	2
Possible (could occur event)	3
Likely (almost certain event)	4
Almost Certain (will occur event)	5

The potential consequences of an injury is rated as:	
Little or no injury	1
Minor injury requiring first aid	2
Moderate injury causing absence from school	3
Serious injury with long term consequences	4
Death or major disability	5

Likelihood	5	L	M	H	H	U
	4	L	M	M	H	H
	3	L	L	M	M	H
	2	L	L	L	M	M
	1	L	L	L	L	L
		1	2	3	4	5
Consequence						

Legend

L - Low (1-7)

M - Medium (8-12)

H - High (13-20)

U - Unacceptable (>20)

Example Scenario: There are large boulders situated in the impact area of the monkey bars. If a child falls from the monkey bar and lands on the boulders -

Likelihood of an injury – Almost Certain (5)

Potential Consequence – Serious Injury (4)

Times the likelihood (5) x potential consequence (4) = 20, the risk level then becomes High.



Risk Benefit Assessment

Also defined in the AS 4685.0 is a Risk Benefit Assessment, a tool to aid risk management that explicitly brings together consideration of the benefits as well as the risks of play in a single judgement. A Risk Benefit Assessment lists the benefits the children receive from a particular task and lists the risks and how they are managed. Below is a risk benefit assessment in regards to allowing the children to climb trees.

Activity:	Tree Climbing	
Date of Assessment:	9th December 2018	
Location:	Back Play Area	
Assessment Undertaken By:		
Approved By:		
Signature:		
Benefits of Activity:	• Building self confidence • Upper body strength activity • Physical motor skills • Problem solving skills • Learning about tree characteristics • Spending time in nature reduces cortisol levels • Children will learn their strengths and limitations • Encourages scientific interests and discovery	
Hazard	Precaution	Comment
Dead Wood	• Remove dead wood branches when found • Inform children of the fragility of dead wood – likely to break, encourage children to monitor	
Slippery Surfaces	• Check condition of climbing surfaces prior to activity • Evaluate weather conditions linked to hazard • Inform children of the hazards and allow self-monitoring	
Fall Heights	• Children self-assess abilities • Children and staff monitor landing surfaces for obstacles • Staff support children when required/requested hand held etc • Use a marker as a height boundary (recommendation 1.8mtr for ECH) • Provision of soft fall under tree	
Protruding branches	• Children self-assess climbing location • Change climbing location or remove branches if deemed too high risk.	

Moveable Play Equipment

The Australian Standard AS 4685 that applies to fixed playground equipment also applies to non-fixed or mobile equipment. Non-fixed or mobile equipment includes trestles and attachments, portable forts, climbing apparatus and many more.

Non-fixed or mobile equipment must be set up on a level surface for stability. An unencumbered impact area as determined by the various fall heights in accordance with AS 4685 is required around the perimeter of equipment with fall heights of 600 mm or more above ground level and between individual items of equipment.

However, for ease of setup and to reduce the severity of injury if a child falls from the equipment, Kidsafe WA recommends that an impact area of 1500mm is applied around and between each piece of equipment that is not linked.

For any equipment with a climbing height 600mm or greater above ground level the equipment must be set up on a certified surfacing (impact absorbing material). It is required that certified surfacing fills the fall zone under and around the equipment.

When setting up non-fixed or mobile equipment, ensure that enclosed openings within the range of 89mm – 230 mm at heights of 600 mm or more above ground level or a supporting surface are not present to avoid the possibility of strangulation by head and neck entrapment.

Kidsafe WA recommends that equipment be limited to a maximum climbing height of 1500mm.



Nature Play

AS4685.0 defines a Natural Playspace as – ‘The elements of a playground consisting of natural, non-manufactured items that are incorporated into the playground, including items such as logs, boulders, plant materials and surfaces, changes of level and other landscape elements.’ Natural playspaces offer a blend of natural areas, environmental features and plants to interest children in learning about the wonders and secrets of the natural world. Manufactured equipment may still be included, however natural playspaces also offer unstructured spaces and activities for learning and spontaneous play.

Benefits of Nature Play

- Children who play in natural settings are more resistant to stress; have lower incidence of behavioural disorders, anxiety and depression; and have a higher measure of self-worth.
- Children who play regularly in natural settings are sick less often.
- Children who spend more time outside tend to be more physically active and are less likely to be overweight.
- Children who play in natural settings play in more diverse, imaginative and creative ways and show improved language and collaboration skills.
- Bullying behaviour is greatly reduced where children have access to diverse nature-based play environments.
- Symptoms of Attention Deficit Disorder are reduced after contact with nature.

What about Safety?

The way in which we apply safety aspects to Natureplay is not really any different to manufactured equipment. The requirements of AS4685 shall apply to natural play elements incorporated into a playground.

NOTE: For example, it may not be practical or desirable to place barriers or handrails on a log or boulder.

- Adequate impact-attenuating surfacing should be provided in the impact area corresponding to the FHoF.
- The impact area should be free of obstacles that could cause injury.
- Hazardous situations that may cause entrapment should be avoided.
- Consideration should be given to preventing easy access to hazardous situations.
- Where the contents of this Standard do not apply directly to natural elements, a risk benefit assessment may be required to determine the suitability of such elements.



Shade in Playspaces

In Australia, UV radiation levels remain high throughout most of the year. Adequate shade in areas where children play outdoors will minimise unnecessary exposure to UV radiation, and create greater potential to reduce the risk of skin cancer later in life. Comfortable and effectively shaded play areas promote physical activity and can contribute to long term benefits in addressing a range of important health issues.

Shade is essential for all playspaces. If an area feels hot or is glary it may not be utilised. Shade provision should be made available for both users of the play equipment and educators supervising the playspace.

Shade and sun protection may be achieved in a variety of ways:

- Locate playgrounds adjacent to the shade canopy of trees. Trees provide the best natural shade quality and assist with lowering the temperature of the area.
- Construct purpose built shade structures or sails over the equipment or erect shelters adjacent to equipment as a refuge for users or carers.
- Consideration should be given to the movement of the sun and its effect on the creation of shade. Equipment should be located or shelters constructed to maximise shade during the hottest part of the day.

Built Shade

Constructed shade systems can be used when natural shade is not available or is being established. Structures may require the approval of local council prior to being constructed.

Built shade includes:

- Permanent structures that can be erected from a variety of materials. They need to be robust and well maintained.
- Adjustable shade systems such as louvered, cantilevered or retractable umbrellas and canvas awnings allow a flexible use option by modifying the shade throughout the day or season.
- Shade structures should not create safety hazards by allowing children to climb onto the shade cover. In order to prevent access by climbing, the lowest accessible edge of the shade cover should provide a minimum clearance of 1.5 m from any part of the play structure or adjacent items in ECH.
- Consideration should be given to ensure shade poles are not within the impact area of the playground equipment.

Natural Shade

The use of natural shade can be one of the most effective and aesthetically appealing ways of providing shade. The use of vegetation for shade has a number of environmental benefits including:

- Less need to use non-renewable resources (used in many building materials)
- Energy saved in comparison with built shade systems, which often have high embodied energy
- Fewer disposal problems as plants generally act as nutrients during decomposition.

Other environmental benefits can be gained by using indigenous (or local native) plants for natural shade.

Conduct a Shade Audit

A shade audit is an essential step to ensure your service has adequate shade to protect children and adults from over-exposure to ultraviolet (UV) radiation. A shade audit assesses the quality, location and amount of existing shade and compares that with the usage patterns at an outdoor site (the timing, duration and location of outdoor activities).

It determines whether some activities could put people at risk of over-exposure to UV radiation and proposes ways in which any risk can be reduced. By considering the specific needs of your service, a shade audit will allow you to ensure that children using your outdoor environments are appropriately and cost-effectively protected from UV radiation by:

- Changing the way your service is used by rescheduling and/or relocating activities;
- Making better use of your existing shade;
- Only creating new shade if it is really necessary;
- Locating shade structures and trees where they are really needed; and
- Creating effective shade that really works.

Your shade audit can assist you to:

- Demonstrate the need to improve the level of UV protection;
- Support and funding to carry out a shade project; plan long-term landscaping and capital works to achieve improved shade; and
- Prepare a development application, if required.

For more information on conducting a shade audit refer to the Cancer Council WA: The Shade Handbook or visit the SunSmart website www.sunsmart.com.au. Alternatively, you can engage a professional shade planner or purchase shade audit software.



Playground Maintenance

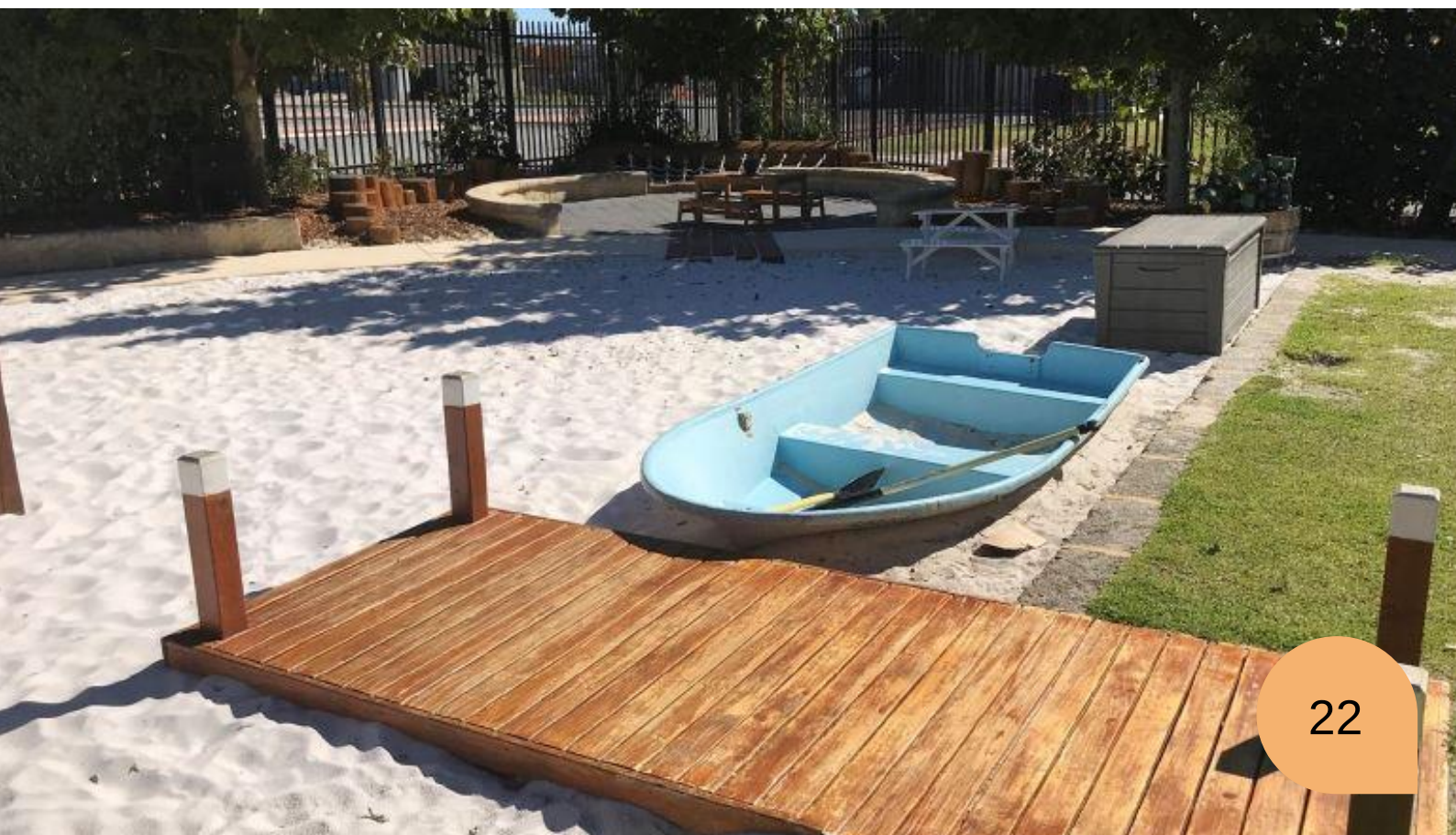
Maintaining your playground is of high importance. It's an asset that you own and therefore should maintain. There are many versions of a maintenance schedule from daily to monthly checks. If you maintain your playground on a regular basis you are accounting for your duty of care for the users.

When planning a playground you should ensure there is access to areas of the playspaces for topping up of sand pits, replacing loose fill, landscaping and lawn mowing services. Your maintenance schedule should consist of a list of components to be maintained and give procedures for dealing with breakdowns. The checklist could include:

- Removal of broken glass, needles, animal fouling and other debris
- Raking and topping up loose-fill impact-attenuating surfacing if there is insufficient material or if it is compacted
- Maintenance to unitary impact-attenuating surfacing
- Repairing or replacing equipment that is broken or missing
- Removing graffiti
- Emptying of bins and removal of rubbish
- Maintenance of ancillary items, such as tables and rubbish bins
- Removal of dead or damaged overhanging branches
- Lubrication of bearings and bushes as required
- Confirming the structural adequacy of all equipment
- Ensuring there are no strangulation hazards
- Ensure outdoor environments are checked to assist in conducting and recording daily inspections of all areas of a centre where foreseeable risks may have arisen overnight

Example Daily Hazard Identification Checklist - Outdoors

See next page



Daily Hazard Identification Checklist - Outdoors

This checklist is to assist in conducting and recording daily inspections of all areas of a program where foreseeable risks may have arisen overnight or where safety may have been affected since the last check.

✓ = Safe X = Needing Attention

Education and Care Provider: _____

Week Beginning:	M	T	W	T	F	✓	X
Outdoor area is free of hazards e.g. broken equipment, trash, water collections, garden tools, trip hazards etc. (also being aware of possible vandalism).							
Gates are locked/closed as applicable and latches are in working order.							
There is nothing near any fence/gate that would assist children to climb over.							
The effective height of all fences/gates is maintained.							
The sandpit is clear of rubbish (raked as appropriate) and covered when not in use.							
Soft playground materials are clear of rubbish (e.g. broken glass, rocks) and other objects that may be a hazard if children fell.							
Loose fill playground surfacing materials under/around equipment is the required depth (raked as appropriate).							
Rubbish bins for children's use are clean and empty.							
Rubbish awaiting collection is inaccessible to children and is stored appropriately until collection							

Checklist adapted from:
 CHC30113 Certificate III in Early Childhood Education and Care
 CHCECE002: Ensure the health and safety of children.

Playground Inspections

There are three types of Playground Inspections as addressed in the current Australian Standards. These are Routine Visual, Operational and Comprehensive Inspections.

Routine Visual (daily/weekly):

A Routine Visual Inspection can be performed on either a daily or weekly basis dependent on the usage of the playgrounds. Some playgrounds that have high use need to be inspected on a daily basis. In a Routine Visual Inspection we identify obvious hazards resulting from vandalism, wear and tear, or weather conditions eg. Damaged parts, broken glass, syringes, loss of undersurfacing

Operational (1 to 3 months):

A more detailed inspection to check the operation and stability of equipment, wear of components such as ball bearings and moving joints.

Comprehensive (Post Construction / ongoing Annual):

A Comprehensive Inspection is often done on a yearly basis. A Post Construction Inspection is done when a new playground is installed. Both types of inspection should be done by a competent person.

For these types of inspections we check for compliance with current Australian Standards. The overall stability of the equipment, footings, surfacing, structural integrity, corrosion/rotting is checked. Safety of any changes made due to repairs or replaced components are also checked.

Competence of Person Performing Inspections

AS 4685.0 states that individuals performing tasks such as assessment, inspection, repair and maintenance of a playground shall be competent to do so.

The Post Installation and Comprehensive Inspections shall be performed by a person who has training and experience that enables them to perform a full compliance check to AS 4685 (all relevant parts).

Equipment not Meeting Current Standards

Equipment that was perfectly safe prior to the introduction of AS4685 did not suddenly become dangerous the day after publication.

All **NEW** playground equipment should meet the latest version of the standards. Older equipment that was installed prior to current standards shall be risk-assessed by a competent person and unacceptable risks addressed.

NOTE: Be careful with overseas certification (particularly labelling, fall heights and Impact Area Distances). Overseas certification does not necessarily mean compliance to Australian Standards.

Equipment Alterations

Alterations to parts of a structure that could affect the essential safety of the equipment should only be carried out after consultation with the manufacturer. If the manufacturer cannot be contacted within a reasonable time, a competent person (other than the manufacturer) should be used.

NOTE: In some circumstances, the person altering existing equipment takes over or shares the legal responsibilities of a manufacturer for the purposes of this Standard. It is therefore recommended that advice be sought.

Routine Visual Checklist – Outdoors

SITE

	Y	N	N/A
Are ancillary items in good working order? (Fences/Gates/Bins)			
Is the site free of dead or damaged overhanging branches that may fall onto the playground?			
Are there any insect infestations?			
Is there any broken glass, rubbish or debris?			

PLAYING SURFACES

	Y	N	N/A
Is surface material free of foreign objects or debris?			
Are concrete footings covered?			
Are loose fill surface levels at an adequate depth? (200mm)			
Are unitary (rubber) surfaces intact and free of damage?			
Are impact areas free of potentially hazardous objects and equipment?			
Are there any trip hazards?			

EQUIPMENT

	Y	N	N/A
Is the equipment clean and free of graffiti?			
Is the equipment in good working order with no missing or damaged parts?			
Are all the sliding surfaces undamaged and free of embedded objects, holes or cracks?			
Are all ropes firmly attached with no visible signs of fraying, cuts or damage?			
Are all uprights and components secure in the ground?			
Are all bolts, fasteners, screws, joiners in place and firmly attached?			
Are all obvious repairs or replacements in good working order?			

OTHER ITEMS

	Y	N	N/A

Inspection Date: _____ Signature: _____

Adapted from AS 4685

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