



# Safe Play Areas on Farms

A Resource Package

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## Thanks and Acknowledgements

This publication has been developed thanks to a number of farmers who participated in a child safety on farms competition held in 2002/2003.

The work of Ros Lanyon, who won the Victorian Section of the competition and who is case studied in Section 6 "A Safe Play Area in Boort Victoria," forms the basis of sections 7&8 of this document. Other participants are acknowledged in the text.

Also, a number of farmers and other experts participated in the documentation and assessment of fencing designs as part of a Rural Industries Research and Development Corporation (RIRDC) research project conducted by the Australian Centre for Agricultural Health in 2004. They are listed in the opening page of Attachment 1.

Version 2 August 2003  
Australian Centre for Agricultural Health and Safety

# Purpose of this Resource

## Purpose:

The resource is for people who have responsibility for children living on or visiting their farm/rural property.

It is also useful for those working with farm families and providing advice on OHS management, childcare and the management of rural properties.

The aim is to help them to:

- decide whether they need a safe play area on their farm or rural property
- design and construct an effective safe play area - usually by modifying an existing fenced house yard
- use the safe play area functionally and creatively.

The resource includes an assessment of fencing options (Attachment 1), a quick checklist to assess your safe play area fencing (Attachment 2) and an action planning sheet (Attachment 3).

We would also appreciate your feedback on the Guide so that we can improve it for future editions so please complete the feedback form in Attachment 4 and return it to Farmsafe Australia as indicated on the sheet.

This resource **does not cover:**

- the safety of play activities and equipment in the safe play area or in the home. For information on these matters contact your State Kidsafe office.
- other farm hazards that cause deaths and injuries to children on farms including:
  - o riding in farm vehicles without a seatbelt
  - o riding on the back of utes
  - o riding on ATV's, tractors & other mobile plant
  - o failing to wear helmets when riding bikes & horses

## What is a safe play area?

A safe play area - such as a securely fenced house yard - is a place where children's social and developmental needs can be met away from the hazards of the farm workplace. The physical separation of the child and the farm workplace works the same way as a swimming pool fence by reducing the risk of a child getting into hazardous areas unsupervised.

**Please note: A safe play area on its own - like supervision on its own - is never 100% effective 100% of the time. But a safe play area is a very useful tool to help keep children safer on farms and rural properties.**

# Why are safe play areas a good idea on farms?

## 1. Kids are being hurt on farms

There are significant dangers in the farm workplace to which everyone - but especially children - are vulnerable. Children are regularly injured in farm incidents (30 deaths each year and 600 hospitalised).

The highest "at risk" group is toddlers and the main hazards are drowning and runover by farm vehicles and mobile plant. Children have travelled 600 metres to drown in a farm dam.

### **Nina and Chris Hensley QLD Cattle property:**

"I am particularly concerned about water hazards, agricultural chemicals and poisonous plants. My husband is more aware of dangers surrounding farm machinery and stock. Together I hope we provide a safe environment for our children which doesn't hinder their natural curiosity and development."

Nina was successful in having the fence around the house yard fixed when she let Chris to look after the kids one day with firm instructions that they weren't to go near the shed. "The next day our yard was made secure."

Both Nina and Chris believe that creating exclusive "out of bounds" area feeds curiosity. They see supervised exploration as a way of removing the mystery and the likelihood that their children will sneak away to explore these areas on their own.

## 2. The farm workplace is not a good place to be looking after children

Off-farm childcare is not always available for farm families and caring for a child within the farm workplace is not ideal:

- ❑ It is especially difficult for adults to always take sufficient care when they are busy working and/or tired
- ❑ Children are regularly injured in the farm workplace while in the care of an adult
- ❑ Many farm activities are not always predictable eg., horses or cattle can do the unexpected.

Children are not generally "looked after" in other workplace settings with significant dangers eg., a factory or a mine site

## 3. A child's behaviour is never entirely predictable

Children are:

- ❑ curious, quick and determined when they decide to do something (eg., run to greet Dad, or catch a pet)
- ❑ not able to always make the right judgements in the interests of their own safety - for example, they can "freeze" when confused or frightened or run in front of a car to pick up a toy
- ❑ not reliable rule followers - children can't always remember or apply the rules.

## 4. It's too late once it happens

The consequences - whether it is your child or a visiting child - are devastating

# Benefits of a Safe Play Area

What are the benefits?

A safe play area:

- ❑ defines the boundary between the “home” and the “workplace” where different standards and rules can apply - it recognises that the workplace contains dangers that generally don’t exist in the home and the distractions for adults are greater (as they go about their work);
- ❑ stops a child from easily/quickly crossing that boundary without the knowledge or approval of an adult; it can also help stop farm hazards from getting near the children (eg horses, cattle)
- ❑ makes supervision of children at play more manageable
- ❑ helps manage child visitors who may not understand farm hazards so well
- ❑ is a place where adults and children can relax together - where a short diversion or lapse in supervision is not critical and where work doesn’t get confused with play
- ❑ is practical and relatively low cost
- ❑ helps professional farmers/farm managers meet OH&S duty of care obligations.

A safe play area is NOT:

- ❑ a way of keeping children on a farm wrapped in “cotton wool”. Children who grow up on farms have a wonderful level of freedom and an opportunity to learn about the environment and nature in ways not available to children in urban areas. However until they are developmentally capable (physically and intellectually) children need to be kept away from the hazards that have the potential to maim and kill (see fact sheet for further information on developmental capabilities).
- ❑ a “prison for kids” - it is a place where children’s social and developmental needs can be met without the threat posed by hazards in the farm workplace
- ❑ one hundred percent effective - plan for the unexpected; understand the weaknesses and limitations of your safe play area
- ❑ a place where children can remain unsupervised - supervision appropriate to the age of a child will always be necessary to ensure the child is safe, happy and occupied in appropriate activities.

# The Role of Supervision

**BUT** doesn't it all come down to supervision?

Supervision is crucial. A safe play area doesn't replace the need for supervision, and supervision does not replace the need for a fenced safe play area. However, how much supervision do children need depends on the individual child, the number of children engaged in play and the type and location of play. While age can be a general guide, as parents know, all kids are different and need to tailor their supervision accordingly.

In the early childhood years children need **constant** supervision (ie an adult is always within sight and sound of the child) during play and "holding hands" or "holding them close" in the vicinity of hazards. Young children are entirely dependent on adults to provide them with appropriate and safe play opportunities. Adults should provide:

- interesting play possibilities
- for exploration within strict boundaries under careful watch
- Provide reassurance to children that an adult is near and will keep them safe
- simple explanations on why some things are "off limits"

*This section on Supervision is adapted from National Children's Center for Rural and Agricultural Health and Safety (2003) Creating Safe Play Areas on Farms. Marshfield, WI: Marshfield Clinic. <http://research.marshfieldclinic.org.au>*

As children get older they have increased mobility and require larger spaces for play. They begin seeking new play/recreation experiences that are more complex and may pose greater risk. They still do not fully understand hazards and their potential consequences. They need **constant** or **intermittent** supervision (ie where an adult might be out of sight and sound for short periods) during play in a safe play area. Adults can:

- Be firm, consistent & promote respect for safety rules
- Take questions seriously and explain consequences of unsafe play
- Explain how and where to contact an adult quickly in case of emergency

As the children become more capable the period where they may be able to play independently of an adult will increase and more reliance can be placed on setting and enforcing consistent rules.

**Rob and Sue Parsons SA Sheep property:**

"We have lots of dams including one right next to the house. The kids are amazed that there are crocs here in SA ... there's even a sign up which warns them."

As well as this "psychological" measure they also have fenced barriers. "We have two cyclone fences around the dam. The outer one is the fence of the house yard and then there is a lane way between it and the second one which is of smaller squares. If they make it through the first the second one generally puts them off. Other water hazards such as troughs and dips we keep covered."

# Making an Effective Barrier

A safe play area is only as effective as the barrier formed by the fence and gates (including latches, closing mechanisms).

A range of factors need to be considered in determining the best type of fence or fences for a given rural setting. A number of fence designs commonly used by farmers/graziers have been identified and assessed in a research project funded by the Rural Industries Research and Development Corporation.

Attachment 1 provides a summary outcome of this research and will assist in selecting a suitable fence design.

There are, however some general principles (also identified through this research) that should be considered when designing a fence and safe play area and these are described in this section of the guide.

Attachment 2 provides a quick checklist that can be used to assess the quality and improvement needs of your current house yard/safe play area fence.



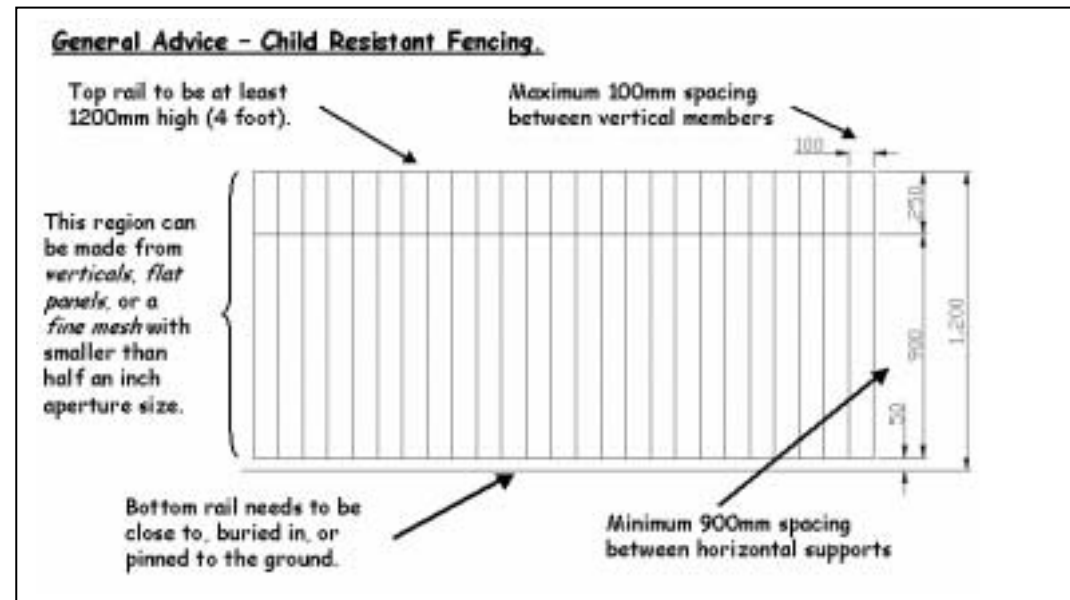
# Making an Effective Barrier

## Safe play area design

- ❑ Consider the size of the area to be fenced in relation to the needs of the child and the cost:
  - a higher quality “child resistant” fence forming a small safe play area is better than a lower effectiveness fence forming a larger safe play area.
  - a smaller, higher quality fenced area within a house yard may be a good option for young children and/or visitors and may be removed when children get older.
- ❑ Keep vehicles/driveways out of the fenced area.

## Fence structure

- ❑ Ensure the fence is at least 1.2 metres high (pool fence standard). Note that 1.5 metres is now the standard for many child care centres
- ❑ Ensure a maximum clearance of 100mm from the ground.
- ❑ Use fencing materials that do not provide children with a hand and foothold to assist climbing (this can include commercially available fencing materials or can be improvised - one farmer used conveyor belting obtained cheaply from a local mine).



- ❑ Keep diagonal stays on the outside of the fence or preferably use box stays so that a child cannot use them as a foothold.
- ❑ Ensure the surface under the fence and gates is not subject to erosion/wear to provide possible access.

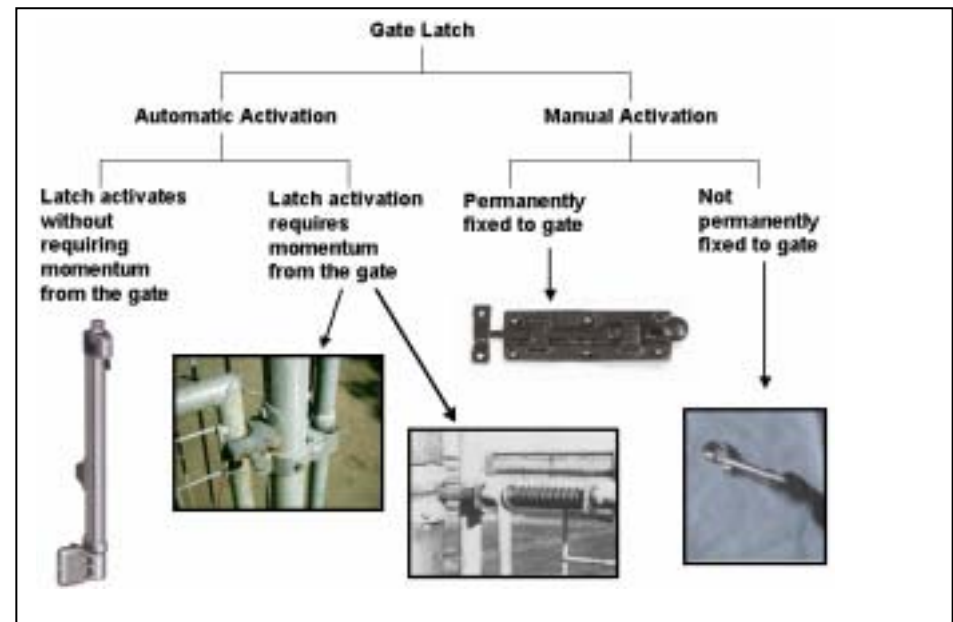
# Making an Effective Barrier

## *Gates and Latching Mechanisms*

The most appropriate type of gate and latch mechanism will depend on a range of factors including how many gates there are, who uses them (eg visitors, contractors) and what is on the outside of the gate. In general:

- ❑ Gates are often a critical weakness as they can so easily be left open - so minimise the number of gates to keep costs down and reduce risk.
- ❑ Ensure that the gate is consistent with the fence in height and configuration to maintain child resistant properties and place latches at least 1.5metres from the ground.
- ❑ A proven automatic latch (such as the “Magnalatch”) with a gate closing mechanism should be used wherever possible (especially on high usage gates).
- ❑ A screw type manual latch can be useful to stop older children opening gates for younger children
- ❑ Consider using a “please close the gate” sign on all entrances to the safe play area and a “please hold my hand” sign on the inside to remind people to hold young children close when they are taken into the farm workplace.
- ❑ Consider placing a bell on commonly used entrances to provide an audible signal that the gate is being opened/closed.

Diagram: Gate Latch Formats



# Making an Effective Barrier

## *Other Factors*

- ❑ Consider the age, size, agility and nature of the children. Prepare for the unexpected - don't assume that because a child hasn't wandered before that they won't tomorrow.
- ❑ Consider special circumstances with visiting children - younger children may follow older children who may not be as reliable as adults in providing care.
- ❑ Consider the level and intensity of adult supervision for children within the safe play area.
- ❑ Ensure that items in the safe play area cannot be used to assist climbing over the fence.
- ❑ Dangerous areas adjacent to play areas could be signposted to make visitors aware of the presence of children, such as "children - slow down".

### **Lyn and Graham Harvey, NSW livestock and cropping farm :**

To create a securely fenced house yard the Harveys have:

- ❑ Built a side fence along the drive between the house and the garage to separate where vehicles enter/exit and the house yard
- ❑ Built a net fence on the dam side of the house with straight wires on the outside so that there were no footholds for climbing
- ❑ Fitted gates leaving the house with fine mesh to make them unclimbable
- ❑ A cubby house, swings and trampoline were placed so that a head count of children could be made with a glance from the kitchen or laundry

As well, a row of shea oaks were planted along the fence line to make the dam look less inviting, the dog kennel was moved to under a big tree outside the yard and leaky, unstable water tanks were removed. "To date I've never had a child wander from the yard while playing. But its not something you can rely on totally ... you still have to keep an eye on them. It's when they go quiet that you start to worry. Also you have to drum it into them. The dam and the road are out of bounds!"



# A Safe Play Area in Boort Victoria

Roslyn and Isaac Lanyon and their children Brydie(8), Otis(6) and Tillie-Mae(4) were the winners of the Victorian child safety on farms award presented at Victoria Farmsafe Forum by Paul Weller President of the Victorian Farmers' Federation in 2003.

The Lanyon's live on a 400 hectare cropping and sheep property near the town of Boort in the north of Victoria. Isaac is a third generation farmer.

Their key strategies for keeping their children safe on the farm are:

- supervision - one of the key reasons for Roslyn's decision to stay at home as a fulltime Mum, farm office worker and farm assistant; and
- a safe play area has been constructed to form a barrier between the children and farm hazards.

Safety has always been an important consideration and incidents at home

and locally have reinforced the need for action.

*"the farm safety competition highlighted the need for seatbelts in the ute - which is one of our slack areas. We now insist on the use of seatbelts. And we never let the kids on the back of the ute. They always nag, but we never give in!"*

The farm includes a dangerous irrigation channel close to the house.

*"We don't tell the kids that there are crocodiles in the water, we tell them that they can drown. We read them stories out of the paper that remind them what can happen on farms."*

Roslyn believes that an interesting outside environment is vital to keeping children within 'safe' areas.

Some of the key features of their wonderful safe play area include:

- a 1.2 metre fence constructed from wire mesh with improvised self latching gates



Part of the Lanyon's Play Area

*"I have yet to see a child successfully climb it. Most people have house yards, but many are inadequately fenced if they are intended to keep the kids inside."*

- The area can be visually patrolled from the kitchen and office and is an adequate distance from the workshop and machinery shed.
- The play area is large (23m by 27m) with age-specific play equipment and activities including:
  - A trampoline at ground level (built above a pit)

# A Safe Play Area in Boort Victoria

- A cubby on several levels, but with ladders which can be removed depending on the age of visiting children
  - A completely shaded sand pit and an expanse of open lawn
  - In summer a shallow wading pool is placed under a shady tree and is only used for “buddy” swimming and under supervision
  - A thoughtful selection of plants (for smell and eating), places for the children to sit and paths that take them through interesting spaces
  - The play area can be partitioned from the rest of the house yard and temporary fences and gates have been used at times to keep little children in the correct areas. As the children get older and their play interests change, they play in other areas of the yard.
- During school holidays Roslyn and the children and plan special theme days, interesting activities and family outings.

Roslyn’s primary teaching background means that she takes into account children’s developmental characteristics when deciding what to allow them to do:

*“We don’t let our children on motorbikes. I’m a bike education teacher and I know their limitations ... tunnel vision for example. Children are unpredictable, and like to push the boundaries as much as possible. Our farm is not perfect by any means and there may be many things we have ‘got wrong,’ but only further education will help us. We are probably ‘over safe’ at times, especially with visitors - but you can never be too careful.”*



# Making a Child Friendly Garden

Some tips on making your play area great place for kids:

Look at the big picture, but start small. Work out what your garden and children need and work from there. Get the kids in on the act - if they're old enough. Ask them about their ideas. Involve them!

Depending on the age of the children most gardens need:

## *Safety*

- ❑ All safety aspects should be looked at - the most important fencing - fence off pools, cover ponds, fence play area and secure gates. The play area is best to be in clear view of the house.
- ❑ Make sure the area that they will be using the most in summer has some form of shade - tree, sail, umbrella.

## *Different areas & play equipment*

- ❑ An area for: running, jumping, climbing, sliding, hiding, chasing, pretending and sitting. Sometimes children need to disappear into their own world and hide.
- ❑ Forget the pre-fab cubby. How many are actually used anyway? Bushes, trees, or maybe a blanket tent can become the most desired thing in the garden.

- ❑ A grassed area is needed!!
- ❑ Maybe a paved area for bikes and trikes.

## *Something to eat*

- ❑ Kids like to eat things - so planning to put some fruit trees; vegies or a strawberry patch in the garden or in pots will be greatly appreciated.
- ❑ Have child friendly plants - choose the right ones. Aromatic, hardy, 'doesn't mind a lot of action" type plants. Avoid toxic - berries, sap, foliage, spiny leaves, and sharp-edged leaves. See the list following of things that are best kept in another part of the garden, or not in the garden at all.

## *Some fun stuff*

- ❑ Something to climb
- ❑ Fun things to do - grow a geranium in your old boots, grow potatoes in a bucket or sprout some seeds on cotton wool inside an eggshell.
- ❑ Plant colour. Plant a range of flowers and colour - but be prepared to have them picked! A wide shallow container is usually the best vase.
- ❑ Personalize the garden - pavers, mosaics, snappy sticks, garden stakes, sculptures, different garden beds, rocks, teapots or anything else you or your kids think of.

# Making a Child Friendly Garden

## What Children Like

- ❑ Children don't care what a garden looks like aesthetically; Children like order in a garden - but also love the wild parts
- ❑ Young children don't always enjoy a large garden - more secure in an enclosed area
- ❑ For 6 years plus, the bigger the garden the better for hide-and-seek, cricket, riding
- ❑ Children like to go round and round - dead ends aren't much fun, a flower bed, bird bath, shrub or tree for them to chase around is a good idea
- ❑ Children need territories and places - what looks like a normal back yard is actually a place of wonder - adventure and different area-jungle, pond, shady corners, bush area, behind the garage
- ❑ Children like privacy - they like the feeling that they can't be watched from the house -obscuring the views as they get older with shrubs, bushes, trees etc.
- ❑ Children like surprise - gardens with several sections have an appeal, a secret path, or a hidden corner
- ❑ Children like forbidden places - like the shed roof, the junk pile, or under things - so check periodically for dangers - electrical wires, spiders, snakes, rusty turned up nails, bottles of poison, broken glass etc.
- ❑ Children have time - and need a spot to sit and do nothing - a lawn, verandah, step or back door
- ❑ Children are destructive - they whip plants, pick flower tops, tramp over garden beds, and use pot plants for their games - rules and reminders are important
- ❑ Children need tough plants in play areas - ones that won't be broken, or destroyed during the normal games in the garden
- ❑ Children like water and mud - channeling, damming, racing sticks etc.
- ❑ Children rarely work in the garden - they love to plant - but often weeding and watering is a bit of a hassle - helping plant and working in the garden may be preferable than giving them their own plot straight off
- ❑ Children like low plants and garden creatures
- ❑ They enjoy challenging and scary things - climbing a tree or monsters in the garden
- ❑ Children like open space - for running
- ❑ Children like rituals - a pet's grave, feeding the chooks, games - step on the crack..etc
- ❑ Children don't like change - so if planning any major changes -do it in small changes and include them in discussions and plans

# Play Ideas for your safe play area

Playing is important for children to develop physically, emotionally, socially and intellectually. An ideal play area blends activities matched to the developmental stages and abilities of children.

Provide play structures and materials in your safe play area that will allow children to experience the following types of play:

- Balance play
- Ball play
- Climbing play
- Fantasy play
- Manipulative play
- Riding play
- Sliding play
- Swinging play



# Play Ideas for your safe play area

## Babies Love:

- Parents and other children
- Watching things that move, that are bright, patterned or shiny
- Exploring their world
- Being sung to
- Attention
- Communicating
- Reaching and grasping
- Being safe, comfortable and feeling secure
- Listening to sounds

## Toddlers

- Painting
- Play dough
- Sandpit
- Slide
- Push-pull toys
- Foot propelled bikes
- Climbing bars
- Music
- Swings/outdoor play
- Big blocks and balls
- Swings

## 3-Year Olds (As for toddlers plus)

- Outdoor play equipment
- Small building or box for crawling in/decorating
- Tricycles and small pedal tractors
- Dressing up

## 4 Year Olds (As for 3 yrs plus)

- Pretend/imaginative play
- Simple games
- Play wheelbarrows, gardening tools, toy kitchen equipment etc
- Bikes - bicycle course or hopping path

## 5 Year Olds (As for 4 yrs plus)

- Skipping rope
- Fort, playhouse, tree-house

## 6 - 8 Year Olds (As for 5 yrs plus)

- Throwing at targets
- Running, skipping, tumbling
- Bicycles, roller skates, in-line skates
- Team ball games
- Magic sets
- Kite flying

## 8-10 Year Olds (As for 6-8 yrs plus)

- Games of strategy
- Outdoor camping
- Team and individual sport
- Music, handicraft, woodwork

# Play Ideas for your safe play area

- Beak freaks - spy and identify the different birds in your garden
- Bird baths, bird houses and bird feeders - attract birds to the garden
- Designate a place in the garden for each child as a birthday garden. Celebrate each birthday by putting a special plant in their garden.
- Butterfly traps
- Corkscrew tendrils are fascinating
- Create a water feature - pond, pot, puddle (but remember that small children can drown in small quantities of water and take the necessary precautions!)
- Dance on a windy autumn day
- Declare a tree in the garden a Wishing Tree - and the kids run 3 times around the tree and then make a wish
- Designate their own space to dig, plant and be free - sunny, close to water. involve them in plant selection at the nursery
- Dinosaur area, jungle, desert, beach, mountains, under the sea, fairy garden. witches garden, pizza garden, etc
- Feely boxes - filled with things from the garden
- Fruit shapes - put a mould over a fruit (still on the tree) and let it grow to fit the mould
- Go on a garden dweller hunt - lizards, beetles and other creepy crawlies
- Have a texture and smell walk
- Have kid-sized tools - wheelbarrow, gloves, trowels, pots, watering cans
- Listen to tree with a stethoscope - you are supposed to be able to hear the sap rising - early spring on deciduous trees
- Make a book out of zip lock bags. Collect treasures and write what they are.
- Make garden ornaments- paver, statues, stakes, windsocks, chimes etc
- Musical instruments - clap sticks, shaker using seed pods
- Nasturtiums leaves - water resistant leaves - roll a drop around the leaves
- Obstacle course
- Plant a row of faces (Pansies)
- Press or dry flowers
- Scarecrow - make a scarecrow - dress him in old clothes - and don't forget a hat
- Tea party in the garden.
- Treasure hunt - using clues to discover the hidden pleasures of the garden
- Use - bells, wind chimes, wind socks to give a sense of theatre to the garden
- Use the weather reports - check and plot the temperature and rainfall



# Play Ideas for your safe play area

There are many ways to use the yard to create exciting play experiences for your children. Here are a few “brainstormed” ideas to use as a starting point:

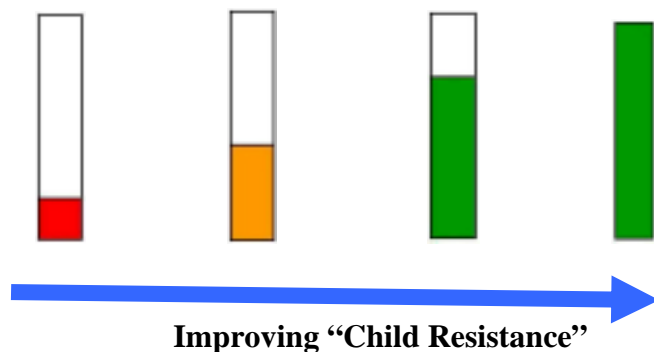
- Animals
- Antarctica
- Apple bobbing
- Art and craft
- Autumn
- Backwards Day
- Balancing
- Birds
- Black and white
- Bridges and tunnels
- Bubbles
- Camouflage
- Computers
- Concert
- Construction
- Cooking
- Countries
- Deserts
- Dinosaurs
- Disguises & pretending
- Dolls
- Drama
- Dreams
- Experiments
- Family picnic day - traditional games eg egg and spoon
- Farm day
- Film and film stars
- Flying
- Food
- French cricket
- Funny things
- Future
- Gold
- Halloween
- Hobbies and collections
- Homemade books
- Hopscotch
- Horse
- Houses
- Insects
- Inventions
- Jungle
- Kites
- Light
- Listening activities
- Lost and found
- Machines
- Magic
- Mazes
- Music
- Myths and legends
- Obstacle course
- Olympics
- Paper planes
- Past
- Patterns
- Photographs
- Picnic, bbq, eating out
- Planets
- Plays
- Princess - prince
- Quoits
- Railways
- Rope fun
- Sack races
- Sand play
- Science
- Shadows
- Shopping
- Song production - using tape recorder
- Space exploration
- Sponge targets
- Spring
- Statues
- Summer
- Teddy Bears
- Treasure
- Trees
- Tug of war
- Tunnels
- Under the sea
- Zoo
- Video production - a day in the life of me.
- Voyages and journeys
- Water play
- Weather
- Wheelbarrow races
- Wheels
- Wild west
- Wishes
- Yo-yo fun

# Attachment 1: Safe Play Area Fencing Options

In a research project funded by the Rural Industries Research and Development Corporation (RIRDC), fence designs were collected from farmers, fencing manufacturers and contractors. An expert panel (see opposite) assessed the designs against the following criteria to provide guidance on the pros and cons on each design:

- Effectiveness of structure as a “child resistant” barrier (the Pool Fencing Standard(AS 1926:1993) was used as a guide).
- Potential to injure or harm a child attempting to climb the fence
- Robustness/durability/capability to withstand typical forces/corrosion and wear resistance
- Materials cost and availability
- Ease of installation, maintenance requirements
- Aesthetics and potential to customise

The fence designs on the following pages include an approximate materials only “cost indicator” and a “child resistance” indicator:



## Expert Fence Review Panel

1. Maureen Fegan - Kids and Traffic
2. Lyn Fragar - Aust Centre for Ag Health and Safety
3. Trish Malins - NSW Commission for Children & Young People
4. Lesley Day - Monash University Accident Research Centre
5. Richard Franklin - Royal Lifesaving
6. Matt Condon- OneSteel
7. David Phillips - Farmsafe Victoria
8. Ros Lanyon VIC - Farmer
9. Gary Lang WA - Farmer
10. Sue Patterson QLD - Farmer
11. Lesley Young TAS - Farmer
12. Ian Forsyth NSW - Farmer

## Contributing Farmers:

Renee Burke (NSW)  
Kylie Douglas (QLD)  
Beverley Norman (NSW)  
Noeline Walsh (NSW)  
Geoff and Lisa Boughton (NSW)  
Alan Kearney (VIC)  
Angela Donaldson (QLD)  
Rosalyn Lanyon (VIC)  
Bill and Tracey Radford (WA)  
Thelma Hutchison (VIC)  
Beverley Newcomen - Remote  
Family Services Uniting Care (VIC)  
Leanne Lancey (VIC)

## Contributing Contractors:

*Design #3*  
Dallas Rumbel [02]49921847  
Fence Craft and Farm Services  
NSW

*Design #6*  
Tony Lavette (02)43247144  
[www.profence.com.au](http://www.profence.com.au)

# Design #1: Netting



- The fence is made with rabbit or chicken wire, with a 25-40mm aperture & wire thickness of at least 1.4mm.
- Horizontal (selvedge) wires support the netting. They are located on the outside of the fence to avoid providing a foothold and the bottom wire is pinned or buried to prevent children from sliding underneath.
- A standard 1050mm width roll of netting can be combined with a roll of 300mm wide netting ( at the bottom) to make the fence at least 1.2m high.
- It is common to run a barb or electric wire on this type of fence for paddocks.

Child Resistance Indicator



Cost Indicator



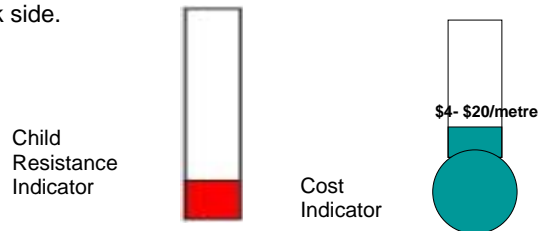
## Comments on Design against Key Criteria

1	Effectiveness as a child resistant barrier	<ul style="list-style-type: none"> <li>• While this fence does not meet pool standards, it has been suggested that the wire is not comfortable for toddler's fingers and toes if they try to climb it; the aperture size of under 40mm, is too small for toddler's shoes. This may not deter some older/bigger pre-school aged children.</li> <li>• Apertures greater than 40mm reduce barrier effectiveness by making it easier to climb.</li> <li>• Barb or electric wire increases effectiveness as a child resistant barrier.</li> </ul>
2	Potential to injure a child attempting to scale the fence	<ul style="list-style-type: none"> <li>• The use of barb or electric wire increases the risk of injury to a child should they attempt to climb the fence.</li> <li>• All wires should be tied off neatly to avoid sharp ends, which may cause injury.</li> </ul>
3	Robustness, corrosion and wear resistance	<ul style="list-style-type: none"> <li>• Wire thicknesses less than 1.4mm are prone to breakage during normal wear and tear.</li> </ul>
4	Material cost and availability.	<ul style="list-style-type: none"> <li>• Rabbit wire is readily available at rural fencing suppliers.</li> </ul>
5	Ease of installation, maintenance requirements.	<ul style="list-style-type: none"> <li>• Installation is straight forward. Regular monitoring of the fence, particularly where stock and farm dogs etc. have access.</li> <li>• Using 300mm netting at the bottom of the fence can extend life of the fence as this narrower piece can be replaced when necessary</li> <li>• If the wire is buried, it may require replacement after a time due to rust.</li> </ul>
6	Aesthetics and potential to customise.	<ul style="list-style-type: none"> <li>• A wooden post and top rail is often used to improve the appearance of this kind of fence.</li> </ul>
<ul style="list-style-type: none"> <li>• This fence has the advantage of being very cheap, made of familiar and readily available materials, and is easy to construct to various support frames.</li> <li>• In the specified dimensions it provides a moderate level of child resistance for toddlers.</li> <li>• A box type stay is preferred to a diagonal stay to prevent children climbing them</li> <li>• The expert panel felt that incorporating barb or electric wire, introduces the risk of injury and harm to children, and that alternative fence designs are preferable. If a barb or electric wire is essential for livestock purposes take child safety needs into account, and make sure that they are well out of reach of young children and that a child could not be trapped by the wires.</li> </ul>		

# Design #2: Fabricated Wire



- Prefabricated fences such as “ringlock” “stocklock” or “hingedjoint” are commonly used on a paddock side of the farm yard. The bottom wire is pinned to the ground to prevent children from going under.
- Only configurations with max 15cm vertical picket spacings are likely to prevent a child climbing through.
- The pictured example shows ringlock for most of the fence, topped with barbed wire, and an electric wire running 750mm above ground, displaced 250mm from the fence on the paddock side.



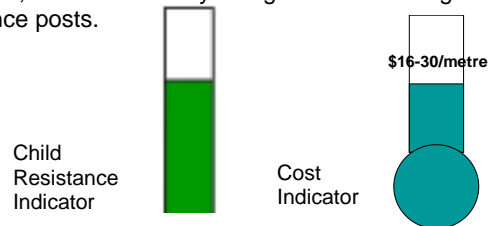
## Comments on Design against Key Criteria

1	Effectiveness as a child resistant barrier	<ul style="list-style-type: none"> <li>• This fence is not effective as a child resistant barrier, as it is easily climbable. Children may also stretch the wire section (depending on size) to go under.</li> <li>• The use of barb or electric wire increases the effectiveness as a child resistant barrier.</li> </ul>
2	Potential to injure a child attempting to scale the fence	<ul style="list-style-type: none"> <li>• The use of barb or electric wire increases the risk of injury to a child should they attempt to climb the fence.</li> <li>• Depending on the aperture size, there is a risk of head entrapment if the child attempts to crawl through the fence.</li> <li>• All wires should be tied off neatly to avoid sharp ends which may cause injury.</li> </ul>
3	Robustness, corrosion and wear resistance	<ul style="list-style-type: none"> <li>• This is a robust and long lasting fence.</li> </ul>
4	Material cost and availability.	<ul style="list-style-type: none"> <li>• Ringlock, Stocklock, or Hingedjoint is readily available at rural fencing suppliers. If purchasing materials, ensure that you order the 1150 mm width roll, and not the more common 900mm width roll.</li> </ul>
5	Ease of installation, maintenance requirements.	<ul style="list-style-type: none"> <li>• Installation is straight forward. Regular monitoring of the fence, particularly where stock and farm dogs etc. have access, is necessary to ensure its integrity.</li> </ul>
6	Aesthetics and potential to customise.	<ul style="list-style-type: none"> <li>• A wooden post and top rail is often used to improve the appearance of this kind of fence.</li> </ul>
		<ul style="list-style-type: none"> <li>• This fence is cheap, made of familiar and readily available materials, and is easy to construct to various support frames.</li> <li>• Prefabricated type fencing provides a poor level of child resistance, compared with other designs as children can readily climb over or under the wires.</li> <li>• The expert panel felt that incorporating barb or electric wire, introduces the risk of injury and harm to children, and that alternative fence designs are preferable.</li> <li>• The level of child resistance may be improved by the addition of a layer of netting (see design 3).</li> </ul>

# Design #3: 12.5mm Mesh



- The use of a 1200x12.5x1.3 welded mesh over a new or **existing** fence. Aspects of this fence design:
  - (1) The mesh must be protected by a top rail, such timber or steel.
  - (2) A middle and bottom horizontal (selvedge) wire on the outside supports the mesh.
  - (3) The mesh is effectively "tensioned" by clipping it to the fencing wires, that are offset by being threaded through wooden fence posts.



## Comments on Design against Key Criteria

1	Effectiveness as a child resistant barrier	<ul style="list-style-type: none"> <li>This fence makes a very good barrier, and may meet the pool standards. (AS1926:1993 requires physical testing, which is yet to be conducted for this design).</li> </ul>
2	Potential to injure a child attempting to scale the fence	<ul style="list-style-type: none"> <li>The risk of injury is low.</li> <li>A pre-galvanised mesh is preferred to a post-galvanised mesh may have sharp excess pieces of zinc.</li> </ul>
3	Robustness, corrosion and wear resistance	<ul style="list-style-type: none"> <li>This is a robust and long lasting fence. The mesh is the weakest aspect, and monitoring will be required to ensure its integrity.</li> </ul>
4	Material cost and availability.	<ul style="list-style-type: none"> <li>This mesh, often referred to as "birdwire", is readily available at rural fencing suppliers. If purchasing materials, ensure that you order the 1200 mm width roll, and not the more common 900mm width roll. Also ensure a wire thickness of <i>1.3mm or greater</i>.</li> </ul>
5	Ease of installation, maintenance requirements.	<ul style="list-style-type: none"> <li>Installation is straight forward. Regular monitoring of the fence, particularly where stock and farm dogs etc. have access, is necessary to ensure its integrity.</li> </ul>
6	Aesthetics, and potential to customise.	<ul style="list-style-type: none"> <li>A wooden top rail is often used to improve the appearance of this kind of fence. The mesh can be painted dark green or black (easiest done while still in the roll) to reduce its visual impact.</li> </ul>
		<ul style="list-style-type: none"> <li>This fence has the advantage of being relatively cheap, looks good, and can be made using readily available materials and familiar methods.</li> <li>The mesh can be fitted to an existing fence with a top rail (at a relatively low cost to improve the child resistant quality).</li> <li>This fence provides a relatively high level of child resistance.</li> </ul>

This design was contributed by fencing contractor Dallas Rumbel - Fence Craft and Farm Services. Contact details are on the first page of this attachment

# Design #4: Solid Fencing

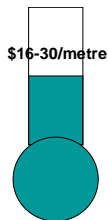


- Corrugated iron, or colorbond steel panels (shown) or other solid materials (eg., used conveyor belting) provide an attractive child resistant fence. Any necessary supporting horizontal structure should be on the outside of the fence.
- In high winds gates made of solid material may swing open under sustained pressure

Child  
Resistance  
Indicator



Cost  
Indicator



## Comments on Design against Key Criteria

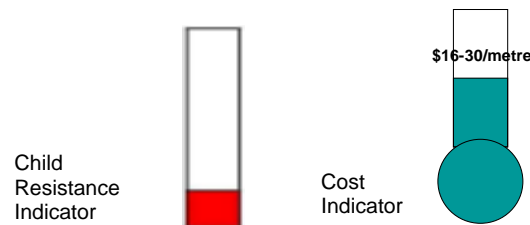
1	Effectiveness as a child resistant barrier	<ul style="list-style-type: none"> <li>• This fence makes a very good barrier, and meets the pool standards at a minimum height of 1.2m.</li> <li>• In high wind gates made of solid material may swing open if latches are not suitably robust</li> </ul>
2	Potential to injure a child attempting to scale the fence	<ul style="list-style-type: none"> <li>• The risk of injury is low if top and bottom rails are used to protect the sharp edges as shown.</li> </ul>
3	Robustness, corrosion and wear resistance	<ul style="list-style-type: none"> <li>• This is a robust and long lasting fence.</li> </ul>
4	Material cost and availability.	<ul style="list-style-type: none"> <li>• Colorbond comes at a higher cost than corrugated iron. Both materials are readily available.</li> </ul>
5	Ease of installation, maintenance requirements.	<ul style="list-style-type: none"> <li>• Installation is straight forward.</li> </ul>
6	Aesthetics, and potential to customise.	<ul style="list-style-type: none"> <li>• Cannot see through the fence - whether this is seen as an advantage or disadvantage will depend on what is on the other side.</li> <li>• The fence may be used to block noise, wind and dust</li> <li>• Colorbond comes in a range of colours and styles.</li> </ul>
<ul style="list-style-type: none"> <li>• This fence is of moderate cost, and provides a high level of child resistance. Part of the fence could be constructed using these materials, particularly to screen noise, dust, wind, and to provide privacy.</li> </ul>		

# Design #5: Chain Wire



- The “chain wire” fence is popular, and used in various configurations. It often accompanies a round hollow section steel frame, or a post and rail arrangement, as shown.
- This material has been used at heights of 1.2m and 1.8m.

Comments on Design against Key Criteria		
1	Effectiveness as a child resistant barrier	<ul style="list-style-type: none"> <li>• This fence does not meet the pool standards, and is easily climbable, due to the large aperture sizes, and the sturdy construction.</li> <li>• At 1.8m, the fence provides a higher degree of child resistance.</li> </ul>
2	Potential to injure a child attempting to scale the fence	<ul style="list-style-type: none"> <li>• At 1.8m, there is an increased risk of child injury if they fall in an attempt to climb over the fence.</li> </ul>
3	Robustness, corrosion and wear resistance	<ul style="list-style-type: none"> <li>• Chain wire is sturdier than chicken wire, and is durable and with a long life.</li> </ul>
4	Material cost and availability.	<ul style="list-style-type: none"> <li>• Chain wire is of low cost, and is readily available. However, the most common supporting structure is round hollow section galvanised pipe, which is approximately \$20 per metre for materials only.</li> <li>• This cost is naturally higher for a 1.8m fence.</li> </ul>
5	Ease of installation, maintenance requirements.	<ul style="list-style-type: none"> <li>• Installation is straight forward, with low maintenance requirements.</li> </ul>
6	Aesthetics, and potential to customise.	<ul style="list-style-type: none"> <li>• A wooden post and top rail is often used to improve the appearance of this kind of fence.</li> </ul>
<ul style="list-style-type: none"> <li>• This fence is easily climbable. There are other options available that are equally attractive and durable, but provide a better barrier for children.</li> </ul>		



# Design #6: 5mm Wire Panel

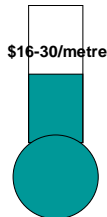


- This fence is manufactured in panels 3m wide, by 1.2m high. The wire thickness is 5mm, and is erected by tech screwing the panels to RHS posts.
- The distance between the furthest apart horizontal supports is 800mm, which makes it difficult for a young child to scale this fence.

Child Resistance Indicator



Cost Indicator



## Comments on Design against Key Criteria

1	Effectiveness as a child resistant barrier	<ul style="list-style-type: none"> <li>This design has been developed to target the rural farmyard market, and comes close to, but does not quite meet the pool standard.</li> </ul>
2	Potential to injure a child attempting to scale the fence	<ul style="list-style-type: none"> <li>There may be a risk of head or limb entrapment in the vertical sections due to the flexibility of the 5mm wire.</li> </ul>
3	Robustness, corrosion and wear resistance	<ul style="list-style-type: none"> <li>This product is galvanised, and is therefore long lasting.</li> </ul>
4	Material cost and availability.	<ul style="list-style-type: none"> <li>The cost is approximately half of similarly designed pool compliant fences.</li> </ul>
5	Ease of installation, maintenance requirements.	<ul style="list-style-type: none"> <li>Installation is straight forward, with low maintenance requirements.</li> </ul>
6	Aesthetics and potential to customise.	<ul style="list-style-type: none"> <li>It is possible at additional cost to paint or powder coat this product to improve the appearance.</li> </ul>
<ul style="list-style-type: none"> <li>▪ This design offers good potential to provide a relatively high child resistant fence – particularly for younger children - at moderate cost, for rural settings.</li> <li>• Further field testing is necessary to further assess design integrity, safety and durability.</li> </ul>		

This gate design was contributed by fencing manufacturer and contractor Tony Lavette of Profence. Contact details are on the first page of this attachment.

# Design #7: 5mm Wire Mesh



- This fence is manufactured in panels 3m wide, by 1.2m high. The wire thickness is 5mm, and is erected by tech screwing the panels to RHS posts.
- This can be seen as an example of any mesh fence, where the horizontal wire supports are close enough together to provide a sturdy climbing support.



## Comments on Design against Key Criteria

Comments on Design against Key Criteria		
1	Effectiveness as a child resistant barrier	<ul style="list-style-type: none"> <li>This fence is not effective as a child resistant barrier, and is easily climbable.</li> </ul>
2	Potential to injure a child attempting to scale the fence	<ul style="list-style-type: none"> <li>The risk of injury is low.</li> </ul>
3	Robustness, corrosion and wear resistance	<ul style="list-style-type: none"> <li>This product is galvanised, and is therefore long lasting.</li> </ul>
4	Material cost and availability.	<ul style="list-style-type: none"> <li>The cost is less than similarly designed pool compliant fences.</li> <li>Currently this product is widely distributed.</li> </ul>
5	Ease of installation, maintenance requirements.	<ul style="list-style-type: none"> <li>Installation is straight forward, with low maintenance requirements.</li> </ul>
6	Aesthetics, and potential to customise.	<ul style="list-style-type: none"> <li>It is possible at additional cost to paint or powder coat this product to improve the appearance.</li> </ul>
<ul style="list-style-type: none"> <li>This design is not effective as a child resistant barrier, and is easily climbed.</li> </ul>		

# Design #8: Pool Compliant Fencing



- The most cost effective pool compliant fencing of this type consists of vertical members that are either 8mm wire, or round / rectangle hollow section steel.
- The distance between vertical members is usually 80 - 90mm.
- The distance between the furthest apart horizontal supports is a minimum of 900mm, which makes it difficult for a child to scale this fence.



Comments Against Key Criteria		
1	Effectiveness as a child resistant barrier	<ul style="list-style-type: none"> <li>• These fence designs are pool fence compliant, and are therefore considered to be highly child resistant.</li> </ul>
2	Potential to injure a child attempting to scale the fence	<ul style="list-style-type: none"> <li>• Risk of injury is low.</li> </ul>
3	Robustness, corrosion and wear resistance	<ul style="list-style-type: none"> <li>• This product is hot dip galvanised, and is therefore long lasting.</li> </ul>
4	Material cost and availability.	<ul style="list-style-type: none"> <li>• Cost is over \$60 per metre for materials only.</li> <li>• These are standard pool fencing designs, which are widely available.</li> </ul>
5	Ease of installation, maintenance requirements.	<ul style="list-style-type: none"> <li>• Installation is straight forward, with low maintenance requirements.</li> </ul>
6	Aesthetics, and potential to customise.	<ul style="list-style-type: none"> <li>• This product is typically powder coated, with a range of colours and decorative upper styles available.</li> </ul>
<ul style="list-style-type: none"> <li>• These designs offer a highly child resistant fence.</li> <li>• If this type of fencing is considered too expensive for a large area, a smaller play area could be considered</li> </ul>		

# Attachment 2: Quick Checklist

## The Risk:

- What are the age and number of children who live on or visit the farm/rural property?
- How close is any open water, farm machinery or vehicle hazards?
- What is the quality of supervision available?
- Have any “near miss” incidents involving children and farm hazards occurred?

## The Fence:

- Is the fence at least 1.2 m high all the way around.
- Is the fence free of gaps, holes or damaged areas which a child could get through?
- Is the fence low enough (all the way round) to stop a child from crawling underneath?
- Is the fence checked regularly and maintained?
- Is the fence made from materials that a child can't climb?

- Is the fence structure free of footholds (strainer posts, wires) that a child could stand on?

## Gates and Latches:

- Are all gates leading from/to the safe play area at least 1.2 m high? Are they constructed so that they cannot be climbed by a child?
- Has the possibility of a child bypassing the safe play area via the house (eg through an open front door) been addressed?
- Do the gates have a self-closing mechanism?
  - If so - is the mechanism reliable & checked regularly?
  - If no - what is being done to ensure the gate is kept closed?
- Are the gate latches “child proof”?
- Is the “child proof” latch reliable and checked regularly?
- Do you check that visitors are unable to reach/open latches?

## The Area:

- Is the area free of any fixed or mobile structures or trees that a child could climb to get over the fence or reach a gate latch?
- Is the safe play area visible from key areas of the house?
- Is the area free of other risks to children (eg are water hazards such as open topped tanks, ponds, troughs excluded)?
- Are all vehicles excluded from the fenced safe play area ?
- Is there adequate shade and are there interesting things to play on/with and to do?
- Do family rules cover how the safe play area is used and maintained?
- Are these rules regularly reinforced with children and adults?
- Do the rules cover the circumstances under which a child can leave the safe play area?

# Attachment 3: Action Plan

## Improvement options:

### Fencing improvements

- 1.
- 2.
- 3.
- 4.
- 5.

### Gate and latch improvements

- 1.
- 2.
- 3.
- 4.
- 5.

### Improvements inside the play area

- 1.
- 2.
- 3.
- 4.
- 5.

### Family rule improvements

- 1.
- 2.
- 3.

## Immediate Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

## Other Action:

1. by:
2. by:
3. by:
4. by:
5. by:
6. by:
7. by:
8. by:

# Feedback Form

If you have used this guide we would be very interested in your feedback to help improve it for other users. Please complete the questions below and return it to us by fax (02-6752 6639) or email: [lauries@health.usyd.edu.au](mailto:lauries@health.usyd.edu.au)

1. How helpful was the tool overall in reviewing/improving your safe play area?

- Very Helpful
- Helpful
- Not very helpful
- Useless

2. What did you find most helpful?

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3. What did you find least helpful?

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4. What are the biggest risks you are managing through your safe play area?

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5. Did you identify the need for any changes?

- Yes    No

6. If yes, what were the main changes you have made/will make?

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7. Your gender?

- Male    Female

live on the farm/rural property? Pls write number in box:

9. Type of farm/rural property (main commodity):

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10. Postcode: -----

11. If you would like to receive information on child safety produced from time to time please include your name and address below:

Name:-----

Postal Address: -----

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-----  
-----  
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E-Mail: -----

# Useful Contacts

The following organisations can provide information on farm safety including training programs and links to farm safety action groups that may be operating in your local area:

## Farmsafe NSW

Ph: (02) 6752 8214  
Fax: (02) 67526639

## Farmsafe Queensland

Ph: (07) 4774 0522  
Fax: (07) 4774 289

## Farmsafe Victoria

Ph: (03) 9207 5509  
Fax: (03) 9207 5510



## Farmsafe SA

Ph: (08) 8232 5555  
Fax: (08) 8232 1311

## Farmsafe WA

Ph/Fax: (08) 9359 4118

## Tasmanian Rural Industry Training Board

Ph: (03) 6331 2131  
Fax: (03) 63314344



## Farmsafe Australia:

Ph: (02) 6752 8218  
Fax: (02) 67526639  
[www.farmsafe.org.au](http://www.farmsafe.org.au)



**Australian Government**  
**Rural Industries Research and  
Development Corporation**