

FARM SAFETY

PROJECT



Australian Government
Department of Agriculture,
Fisheries and Forestry



PRIMARY
PRODUCERS
SA

DELIVERED BY: **agcommunicators.**

TEACHER RESOURCES

YEAR 5 - 7
STUDENTS

2023

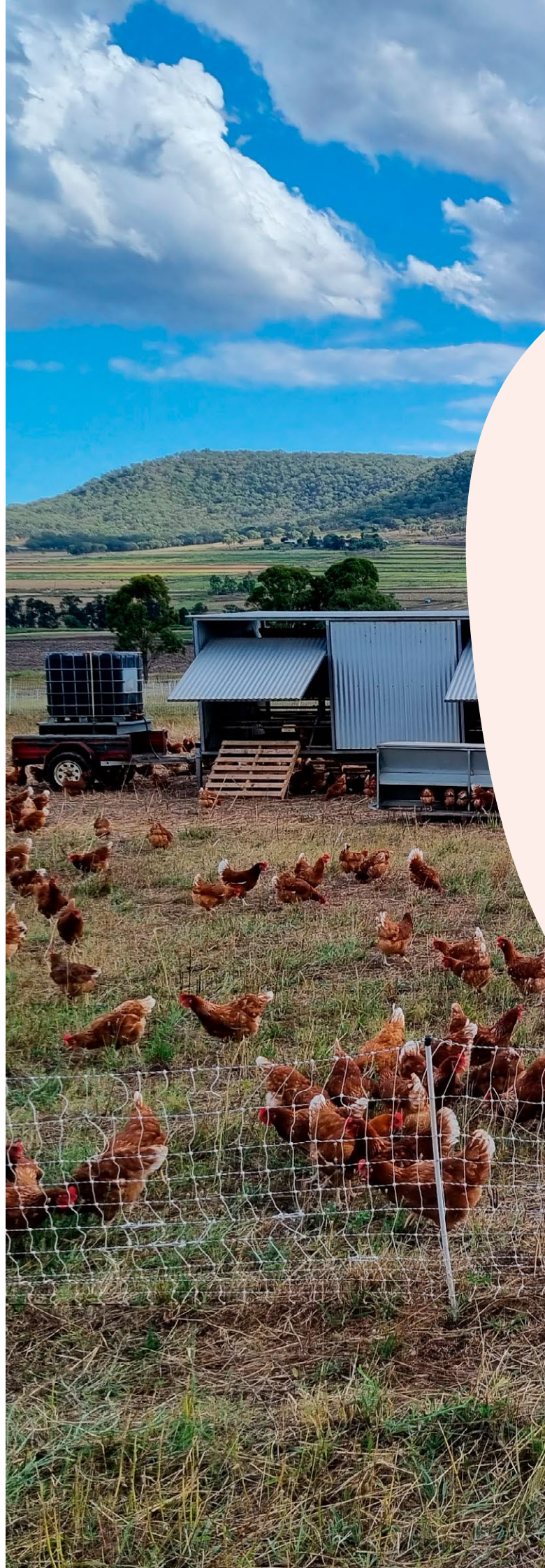


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Disclaimer: This teacher resource and the accompanying videos are intended as general guides only and are designed to be used to increase risk awareness and safe work practices. They are not a comprehensive list of risks and hazards on farm and are not legal advice. These teacher resources do not take the place of proper individualised on-farm workplace inductions, work, health and safety training, or any other tailored steps, which may be necessary to protect health and safety at specific farms or worksites.

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Foreword

The team at Primary Producers SA (PPSA) are passionate about keeping farmers and their families safe. PPSA's vision is for a strong and viable primary production sector in South Australia which is valued by government and the community. Part of our role is to partner with government and industry to develop policies and programs that promote the social, economic, and environmental sustainability of South Australian primary production. In order to be sustainable, we must keep our people safe and set a culture of best practice when it comes to farm safety.

Recently, we were fortunate to receive a grant from the Department of Agriculture through the National Farm Safety Education Fund: Improving Farm Safety Practices project. This grant has enabled the development of a suite of videos and supporting education resources for students in years 5 to 7, as well as their teachers and families. It also supports school outreach and teacher professional development.

PPSA has worked with the education team at AgCommunicators, under the guidance of a project steering committee comprising representatives from each of the PPSA commodity groups, to identify gaps in the farm safety resources currently available across Australia. From this,

we have identified the key safety risks in each area. While many states had farm safety resources for families and farmers, none of them had curriculum-linked resources for students in the Year 5-7 age group.

We worked with South Australian schools to develop key messages and students from those schools feature in the videos to deliver those messages about farm safety in the grains, livestock, viticulture, dairy, horticulture and forestry sectors. The messages within the videos and supporting resources have been endorsed by FarmSafe Australia, SafeWorkSA, KidSafeSA and the PPSA commodity groups.

We listened to feedback which suggested that kids teaching kids (peer to peer learning) was important, making language accessible, and setting a clear message on protecting your mates. Together with our student working group we came up with the motto, **PROTECT YOUR PEOPLE**. You will see this message throughout all our resources. Ultimately, we know that while farms are fun to visit, they are not a playground. There are serious risks and we need to address these, be upfront about them and have open conversations. These resources will assist you in having that conversation. We encourage you to have honest discussions about near misses and safety with your students.

And don't forget ... PROTECT YOUR PEOPLE!

PROFESSOR SIMON MADDOCKS
PPSA CHAIR

Background - about farm safety

According to the Safer Farms 2022 Agricultural Injury and Fatality Trend Report, *Safer farms, safer farmers*, 222 children have died on farms since 2001. This is the frightening reality. Most of these deaths were the result of vehicle accidents, with quadbikes alone accounting for 32 fatalities. Water safety has also taken a devastating toll on families with 76 children drowning.

While the statistics indicate that the number child fatalities on farms is reducing, any death or serious injury on farms is a tragedy. Providing safety information and practical strategies for children visiting or living on farms is a powerful tactic to help achieve the goal of farm safety for all.

In our scoping survey with the commodity groups, it was clear that there were a range of risks which are common across all agricultural commodities, such as quad bikes and water. However, we found some risks are more likely to occur on different types of farms. For example, grain farms were more likely to have risks relating to silos or chemicals, whereas livestock farms may have effluent ponds or guns. Each resource (i.e. the video and teacher resource) works to address the priority risks which kids may encounter when they visit different farming enterprises. However, it is important to note that **not all risks can be covered**. The table below outlines the risks that will be addressed in the resources.

Overarching safety priorities	Overarching safety strategies	Grains	Livestock	Horticulture	Viticulture	Dairy	Forestry
common to all industries	common to all industries						
Working outdoors, sun, snakes, spiders, stings	Learn safe behaviour – check visiting kids know, too	Augers	Large animals, esp. males, mothers & offspring	Packhouses – busy sites	Hand tools	Confined spaces	Large machinery, specifically harvesters
Tractors & machinery	Define safe play areas away from work areas	Silos	Guns	Forklifts	Forklifts	Large animals	Chainsaws
Quad bikes	PPE incl hi-vis, hearing protection, footwear, helmets	Powerlines	Zoonoses	Water safety	Water safety	Zoonoses	Chainshot risk
Chemicals	Adult supervision – communicate & plan	Workshop safety	Water safety	Manual handling	Terrain	Electric fences	

There is a range of industry resources which you can utilise for further reading and insights:

- Safework SA and PPSA Farmers' guidebook [Farmers' Guidebook to work health and safety \(safework.sa.gov.au\)](https://safework.sa.gov.au)
- KidSafe SA [Farm Safety | Kidsafe SA](#)
- FarmSafe Australia [Resources - Farmsafe](#)
- George the Farmer Farmsafe Guide [Farm Safety Educators Guide - George the Farmer](#)
- Child Safety on Farms – Victorian Farmers Federation <https://www.makingourfarmssafe.org.au/resources/>



Farm Safety Learning Sequence

The content of these videos and classroom activities has been developed with guidance from FarmSafe Australia, SafeWork SA and KidSafe SA. The resources provide up-to-date information to support the delivery of curriculum units on farm safety in schools.

The farm safety learning sequence will be enriched by sharing stories and practical experiences for students.

Before beginning, establish protective practices for students who may have connections to traumatic experiences relating to work health and safety and farm accidents. Informing parents via the school or class newsletter using the article provided on page 7 will provide the opportunity for families to inform teachers if this is likely.

Pre and post-video discussions will be crucial in reinforcing concepts and exploring students' feelings about farm safety to create a personal connection to the ways to "protect your people".

If the site does not have a school farm or commercial farm nearby to visit, consider using alternate locations such as school or community gardens, the school grounds shed or workshop, technology workshop, food specialisation facility or science laboratories.

All practical activities should implement and embed the 4Ps (pair up and plan, pause and practice, play in safe areas and pop on your PPE) and good hygiene practices (for both personal and biosecurity purposes). Work with your school to develop a WHS Plan prior to delivery.

Curriculum links

The Farm Safety project delivers content from the Australian Curriculum (Version 9) and South Australian Department for Education's Technologies Scope and Sequence.

Technologies
 Design and technologies
 September 2022 Scope and sequence
 Revised to align with the Australian Curriculum V9.0 (2022)

Producing and implementing

By the end of year 6, students:

- select technologies and techniques to safely produce designed solutions

Producing and implementing

By the end of Year 8, students:

- independently and collaboratively document and manage production processes to safely produce designed solutions.

Year 5	Year 6	Year 7
<p>Identify and make decisions about the use and suitability of materials, components, tools, equipment and techniques to safely make designed solutions.</p> <p>Students:</p> <ul style="list-style-type: none"> identify and use safe procedures and equipment to protect themselves and others when designing solutions, for example, using safety glasses, gloves or other personal protective equipment (PPE) when handling models or foodstuffs select and use tools, equipment and techniques appropriate to the purpose, for example, safely following operating procedures for equipment like blenders when preparing smoothies identify and follow agreed safety protocols when creating solutions, for example, following kitchen rules and procedures to ensure they are using equipment safely, such as making sure pan handles are turned away from people moving in the space to avoid potential burns develop awareness of injury prevention, basic first aid and reporting processes if injury does occur while creating designed solutions. 	<p>Select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions.</p> <p>Students:</p> <ul style="list-style-type: none"> use appropriate personal protective equipment (PPE) when using some tools and equipment, for example, protective eyewear, and working safely, responsibly and cooperatively to ensure safe work areas, for example, the safe disposal of batteries when constructing an electronic device develop an understanding of injury prevention, basic first aid and reporting processes if injury does occur while creating designed solutions. 	<p>Select and use suitable materials, components, tools, and equipment to safely create designed solutions.</p> <p>Students:</p> <ul style="list-style-type: none"> understand the importance of implementing safe work practices and operating procedures effectively and safely use materials, components, tools, equipment, and techniques to produce a solution reduce risks associated with production activities by maintaining a safe attitude in practical work areas

Parent information letter

The letter below can be adapted to suit your school's WHS policies. It is suggested this be sent home prior to commencing the farm safety units.



Dear Parents and Carers,

RE: COMMENCEMENT OF A FARM SAFETY TEACHING UNIT

Because the safety of our students is so important to us, we are dedicating important lesson time to increasing their understanding of the risks of farms for children – whether they are living on a farm, visiting one or experiencing a school farm.

It is a frightening reality that since 2001, more than 220 children have died on Australian farms with vehicles like quad bikes and drowning being the most common causes of child fatalities.

The farm safety curriculum will be delivered as part of their Technologies curriculum and will use the **4Ps: Protect your People** strategies:

✓ **Pair up and plan**

Children should work with an adult to talk about what they will be doing on the farm and what the rules are for that farm – where they can go safely, what they can do safely.

They should always have adult supervision when they are on a farm.

✓ **Pause and practice**

Children should stop and think before they do anything on the farm, make sure they have learned the safe ways to be involved and practiced the skills they need.

✓ **Play in safe areas**

Farms are workplaces, not playgrounds. Children should only play in safe areas with secure fencing, away from water, machinery and other hazards.

✓ **Pop on your PPE**

Personal protective equipment (PPE) can help to make children easier to see and protect them from harm.

Students will watch farm safety videos set in key farming industries of grains, dairy, livestock, viticulture, horticulture and forestry and participate in a variety of classroom and practical activities to reinforce and embed the crucial safety concepts.

To support your student as they experience this program, you can share your own stories of workplace safety and work with them to identify ways to improve safety in your own home and outdoor environment.

If you are living on or visiting a farm, here are some tips to keep your kids safe:

- Supervise your children at all times
- Remember, farms are workplaces with many risks like water bodies, machinery and large animals
- Chat to the farmer to identify the safe areas and hazards on their farm
- Use the **4Ps** to **Protect your People!**
- Check out the great farm safety resources on the KidsSafe SA website:

<https://www.kidsafesa.com.au/farm-safety/>

and this website specially designed for families on Australian farms:

<https://www.makingourfarmssafer.org.au/resources/>

Please contact us confidentially if this topic could be triggering for your student or if they have had some personal experience of farm safety issues.



Farm Safety Project curriculum resource map

This map lists the videos and learning activities in a suggested sequence. They have been designed to use a range of learning styles and opportunities to allow students to experience and embed strategies to be safe on farms.

Please consider that the videos alone will not provide opportunities for students to fully understand key safety ideas. The class discussion themes lead you and your students to consider and explore important concepts in more depth. Depending on your cohort of students and the time available, you may opt to complete selected classroom and practical activities rather than all of them.

Digital versions of the teacher resource booklet and student activity booklet can be found at:
[Projects | Primary Producers SA \(ppsa.org.au\)](https://www.ppsa.org.au)

The complete farm safety video playlist can be found at:
bit.ly/PPSA-Farm-Safety-For-Kids

Industry area*	Hierarchy of Control	4 Ps Protect your People	Key safety messages	Class discussion themes	Classroom activity	Practical activity
Introduction to farm safety for children	✗	✓	Farms are workplaces with risks for adults and children. 4Ps Protect your People strategies	Discuss safety in general. Look at Kidsafe SA Kidsafe for ideas. Revisit everyday safety strategies. Discuss how these ideas might transfer across to a farm setting.	Brainstorm the dangers on farms Fact check using FarmSafe Australia statistics. Become familiar with 4Ps Protect your People. Create a safety wordwall	Locate first aid kits in the classroom and elsewhere in the school. If they are hard to find, discuss and implement ways to make them more accessible.
Hierarchy of Control (PIEFA)	✓	✗	Hierarchy of Control will help to reduce risk on farms	Pre-video – display the HoC posters and discuss HoC terms. Post-video: check for understanding; discuss other situations and apply the concepts featured.	Brainstorm a list of PPE. Discuss what and how they are providing protection. Add PPE to a student image.	Find a tool or piece of equipment and assess using the HoC.
Dairy	✗	✓	4Ps: Protect your People Large animals Water safety Electric fences Hay bales Machinery Zoonoses Manual handling	Pre-video: industry background discussion. Post-video: review key concepts including 4Ps.	Role play Creative writing from the perspective of Ros the dairy farmer or the visiting children focusing on how she has made her farm safe for kids.	Mark safe play areas on a school map or aerial image. Discuss what makes a play area safe.
Grains	✓	✓	4Ps: Protect your People Hierarchy of Control Chemicals Augers Silos Powerlines Quad bikes/machinery Workshops	Pre-video: industry background discussion. Post-video: Examples of the 4Ps shown in the video; discuss how age and experience of children can influence their safety.	Worksheet with chemical safety focus.	Complete a school farm safety audit and create a list of safety jobs to do.
Livestock	✗	✓	4Ps: Protect your People Working with large animals Quad bikes Guns Zoonoses	Pre-video: industry background discussion. Post-video: What makes livestock dangerous; compare different species – poultry, pigs, cattle, horses; guns	Create a workshop poster or design a safety logo for a hi-vis farm shirt that promotes the 4Ps.	Pause and Practice safe livestock handling OR Pause and practice safe manual handling.
Horticulture	✗	✓	4Ps: Protect your People Noise Forklifts Heights Working outdoors Worker safety in busy areas	Pre-video: industry background discussion. Post-video: respond to video questions as classroom activity.	Use video transcript for group work brainstorm to respond to video questions.	Complete a risk assessment for working outdoors – consider sun, weather hazards, snakes, stingers like bees and spiders.
Viticulture	✓	✗	4Ps: Protect your People Hierarchy of Control Quad bikes Machinery Working outdoors Water safety Hand tools Uneven terrain	Pre-video: industry background discussion. Post-video: Safety statistics for quad bikes and machinery.	Select activities from SOLO grid on machinery and vehicle safety on farms.	Assess school farm or school site for machinery and vehicle safety.
Forestry	✗	✓	4Ps: Protect your People Plantation safety Forestry harvesters Safe operation of chainsaws PPE for chainsaws	Pre-video: industry background discussion. Post-video: Responses to video questions.	Design a kid safe farmyard. Could use Minecraft, pen & paper or build a model.	Play "Safety Spotto"

*Listed in suggested order of completion



PROTECT YOUR PEOPLE!

FARM SAFETY
PROJECT

PAIR UP AND PLAN



Work with an adult to talk about what you will be doing on the farm and what the rules are for that farm such as where you can go and what you can do.

Always have adult supervision when you are on the farm.



PAUSE AND PRACTICE

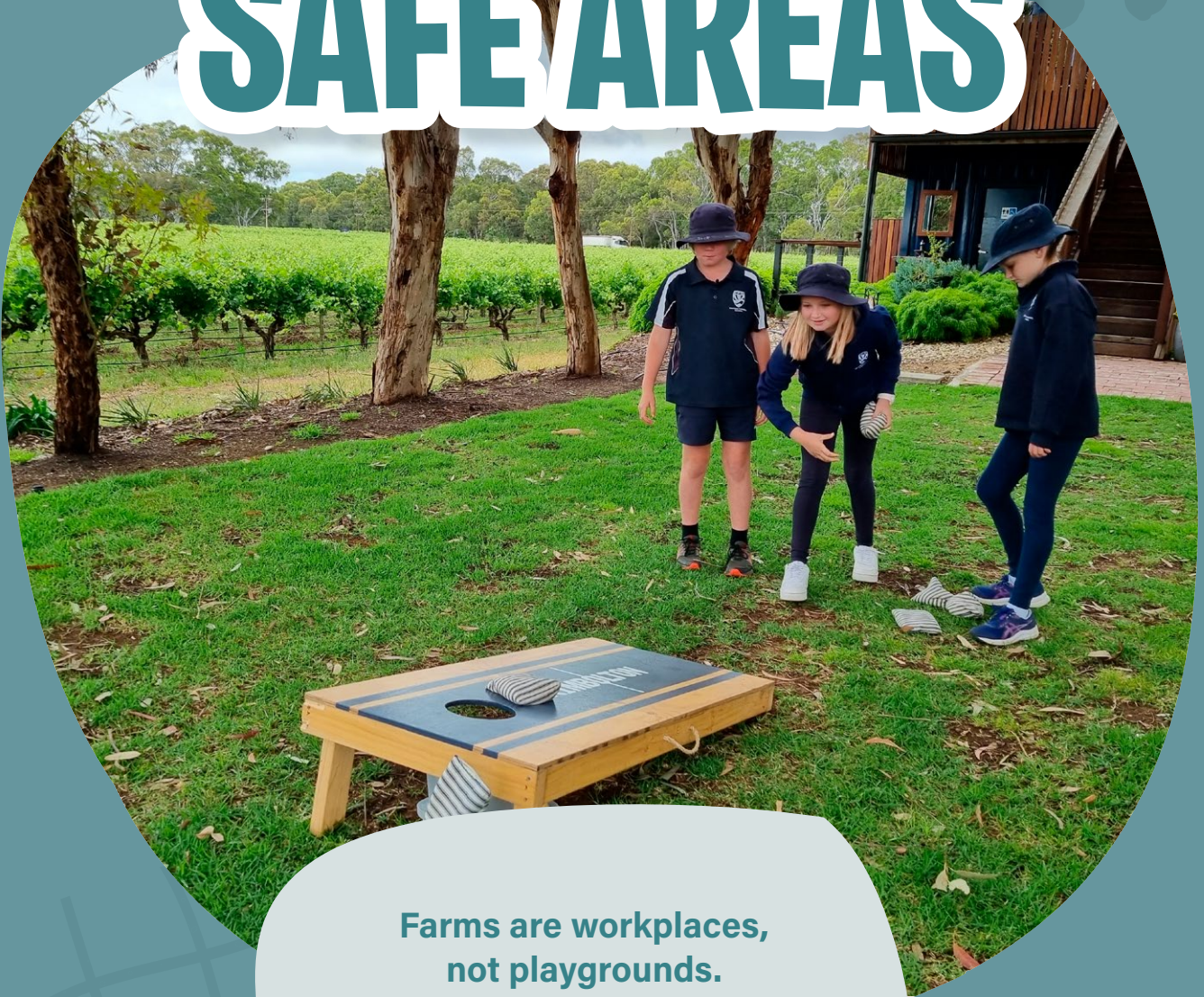


Stop and think before you do anything on the farm.

Make sure you have learned the safe way to be involved and practiced the skills you need.



PLAY IN SAFE AREAS

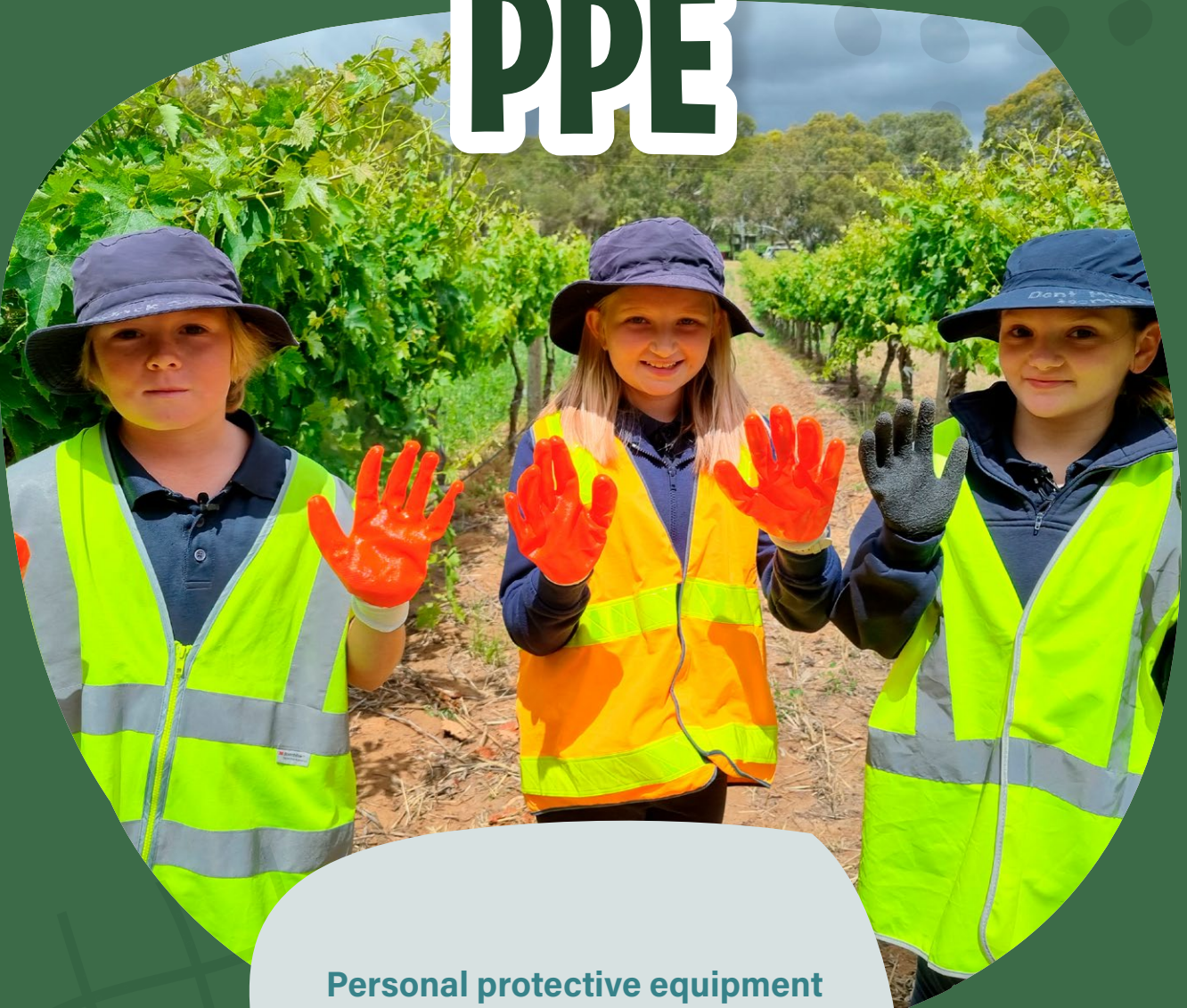


**Farms are workplaces,
not playgrounds.**

**Only play in safe areas with
secure fencing, away from
water, machinery and
other hazards.**



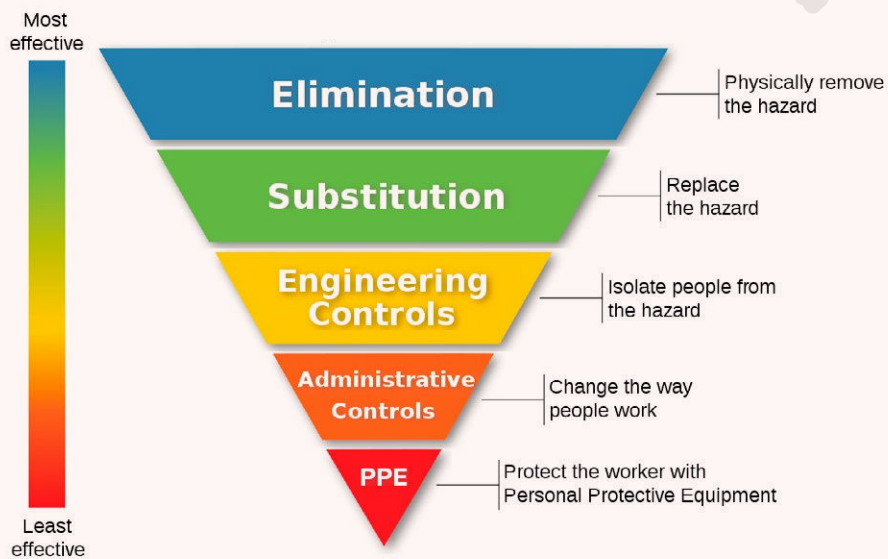
POP ON PPE



Personal protective equipment (PPE) can help to make you easier to see and protect you from harm.



HIERARCHY OF CONTROLS



Hierarchy of Control for kids



Introduction to Farm Safety

The introduction to farm safety sequence includes the following components:

1. Class preparation and discussion
2. Classroom activity: brainstorm, 4Ps, safety wordwall
3. Practical activity: first aid kit treasure hunt



Class preparation and discussion

Discuss safety in general.

Look at the KidsSafe SA website [Kidsafe SA | Kidsafe for ideas.](#)

Revisit safety strategies like dialling 000, basic first aid, school site safety rules.

Discuss how these ideas might transfer across to a farm setting.

In small groups, students should role play how they can help in an emergency such as an accident or injury. Encourage them to practice getting an adult to help and sharing the information a 000 operator will ask for (Where is your emergency? What is your emergency?).

KidsSafe SA provide these tips for families about being prepared for an emergency on farm:

- *Make sure you have several first aid kits located around the farm for use.*
- *Always keep a fire extinguisher in the house, workshop and on the tractor.*
- *Have an Emergency Services Card that includes details such as your property name, emergency services address, phone number, UHF channel, coordinates and length of yours and your neighbour's airstrips, neighbour's contact details and emergency contact numbers.*
- *Ensure you have an evacuation plan developed to use in the event of an emergency and practice this with your family. This will ensure that all adults and children are aware of what they need to do in the event of a serious farm injury.*
- *Ensure emergency numbers are kept near each telephone and teach your children how to call for help in an emergency*
- *Keep the Poisons Information Centre number close to the phone: 13 11 26 (this is Australia Wide, 24hours a day, 7 days a week)*

Students may enjoy this online 000 game on the Emergency Services Telecommunications Authority website:

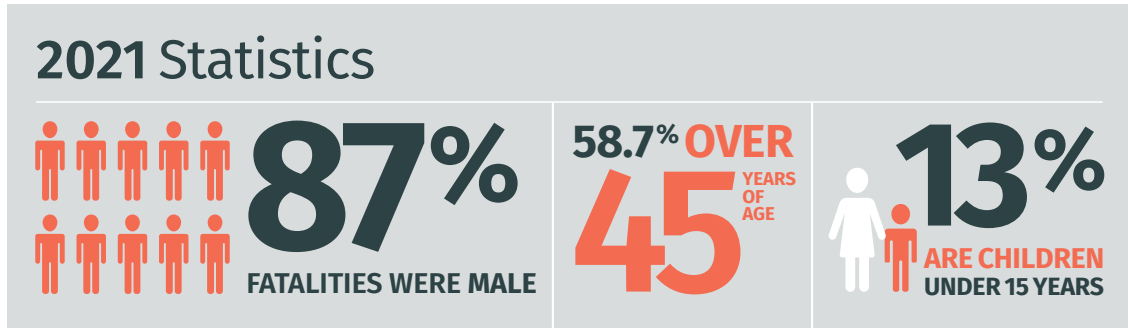
[Try the new kids' triple zero \(000\) game | ESTA](#)

Use the [SafeWork SA and Primary Producers SA Farmers' Guidebook](#) to work health and safety as a reference ([Farmers-guidebook.pdf](#)). Specific information about safety for children on farms is covered on pages 14 and 15.



Classroom activities

In small groups, students brainstorm the dangers for people on farms and record their responses on butchers paper. Fact check using the information below from FarmSafe Australia's Safer Farms 2022 Agricultural Injury and Fatality Trend Report *Safer farms, safer farmers*. Support students in interpreting the data.



Common Agents of Fatality 2021



Common Agents of Injury 2021



Each group should then discuss and identify what they imagine is the most dangerous thing for children on a farm and share this with the class.

Discuss the different groups' decisions and fact check these using the table below from FarmSafe Australia's Safer Farms 2022 Agricultural Injury and Fatality Trend Report, Safer farms, safer farmers.

Support students in interpreting the data.

AUSTRALIAN CHILD FATAL FARM INJURIES 2001-2019

AGE / SEX				CHILD (0-14 YEARS)		STATE / TERRITORIES		
AGE GROUP (YEARS)	MALE n (%)	FEMALE n (%)	TOTAL n (%)	AGENT	TOTAL	LOCATION	TOTAL	PERCENTAGE %
0-4	85 (38.3)	29 (13.0)	114 (51.3)	Animal	16	NSW	65	29.3
5-9	32 (14.4)	16 (7.2)	48 (21.6)	Horse	12	NT	1	1.8
10-14	44 (19.8)	16 (7.2)	60 (27.0)	Farm Structure	76	QLD	73	32.9
TOTAL	161 (72.5)	61 (27.5)	222	Water	10	SA	9	4.1
				Dam	45	TAS	10	4.5
				Pool	9	VIC	39	17.6
				Creek/ River/Irrigation	6	WA	22	9.9
				Farm Vehicle	90	TOTAL	222	100.00
				Quad Bike	32			
				Motorbike	13			
				Ute	17			
				Car	12			
				Mobile Farm Machinery	27			
				Tractor	14			
				Other	13			

Research for citation for all stats in this section: Peachey K-L, Lower T, Rolfe M. *Protecting the future: Fatal incidents on Australian farms involving children (2001-2019)*. Aust J Rural Health. 2020; 00:1-9.

¹ The status of four cases (resident/visitor) could not be determined from the available data.



Classroom activities, cont...

Display the **4Ps: Protect your People** posters and discuss what each step may mean.

✓ Pair up and plan

Children should work with an adult to talk about what they will be doing on the farm and what the rules are for that farm, such as where they can go safely and what they can do safely.

Children should always have adult supervision when they are on a farm.

✓ Pause and practice

Children should stop and think before they do anything on the farm and make sure they have learned the safe ways to be involved and practiced the skills they need.

✓ Play in safe areas

Farms are workplaces, not playgrounds. Children should only play in safe areas with secure fencing, away from water, machinery and other hazards.

✓ Pop on your PPE

Personal protective equipment (PPE) can help to make children easier to see and protect them from harm.

Create a safety wordwall using a whiteboard, poster chart or online platform such as [Word Cloud – online word cloud generator](#)

Aim to achieve a balance of danger terms and safety terms as the students are led to think proactively about safety and accident prevention.

Suggested terms:

accident	hazard	risk
careful	injury	safe
damage	plan	safety
danger	practice	security
death	prevention	shield
fatality	protection	supervise
guard	responsibility	workplace



Practical activity

Conduct a first aid kit treasure hunt in the classroom and elsewhere in the school. If they are hard to find, discuss and implement ways to make them more accessible (such as signs on cupboard doors).

Hierarchy of Control

The hierarchy of control safety sequence includes the following components:

1. Pre-video display and discussion
2. Hierarchy of Control safety video
3. Post-video discussion
4. Classroom activity: PPE brainstorm and image
5. Practical activity: HoC with tools

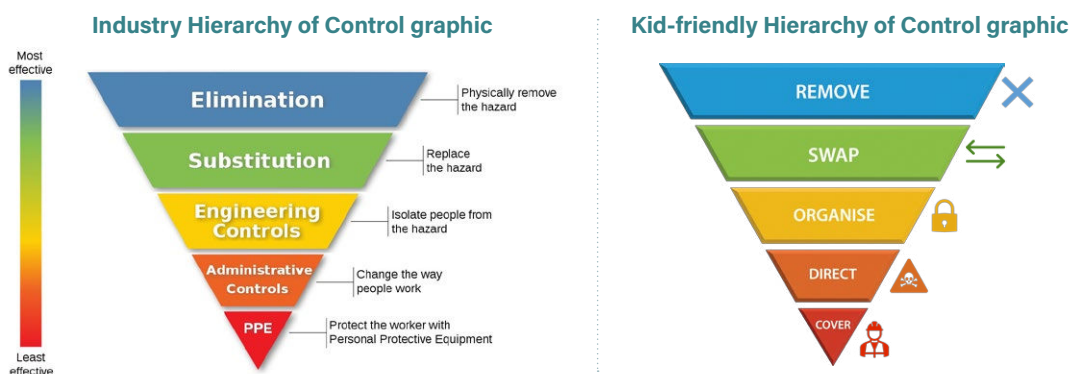


Pre-video preparation

Display the Hierarchy of Control posters and discuss the terms, checking for understanding.

FarmSafe Australia recommends the Hierarchy of Control as the preferred system for assessing and reducing risks on farms and in other workplaces.

Compare the two charts – the industry Hierarchy of Control and the Hierarchy of Control for kids.



The information below on control risks has been taken from the SafeWork SA website.

Control risks

The ways of controlling risks are ranked from the highest level of protection and reliability to the lowest. This is known as the hierarchy of risk control.

Where possible, implement the highest order risk controls.

LEVEL 1

Eliminate: Remove the hazard completely from the workplace, such as removing trip hazards on the floor or disposing of unwanted chemicals. This is the most effective control measure and must always be considered before anything else.

LEVEL 2

Substitute: Substitute or replace the hazard with a less hazardous work practice, such as replacing solvent-based paints with water-based paints.

Isolate: As much as possible, separate the hazard or hazardous work practice from people by distance or using barriers, such as placing guards around moving parts of machinery.

Engineering controls: These are physical control measures, such as using a trolley to lift heavy loads.

LEVEL 3

Administrative controls: These should only be considered when other higher order control measures are not practicable. These are work methods or procedures that are designed to minimise the exposure to a hazard, such as developing a procedure on how to operate machinery safely or using signs to warn people of a hazard.

Personal protective equipment (PPE): Ear muffs, hard hats, masks, gloves, protective eyewear and other forms of PPE should be a last option as they do nothing to change the hazard itself. Effectiveness also relies on the proper fit, use and maintenance of the equipment.

In some cases you may need to implement a combination of control measures to provide the highest level of protection that is reasonably practicable.

When selecting and implementing a combination of control measures it's important that you consider whether any new risks might be introduced as a result.



KEY SAFETY MESSAGE
= understanding the
Hierarchy of Control

bit.ly/PPSA-HoC



Post-video discussions

Check for understanding – can the students describe the five levels of the Hierarchy of Control and identify the examples shown in the video?

- Remove
- Swap
- Organise
- Direct
- Cover

Reinforce the concept that the top level is the most effective at protecting people and that covering with PPE is the least effective.

Discuss other situations that are relevant for the school site or students' experiences and apply the five controls.

Can the students identify different terms to substitute in the Hierarchy of Control for kids that they believe are more useful or easier to understand?





Classroom activity

Brainstorm a list of personal protective equipment (PPE). Having a “lucky dip” box with different PPE in it can be used to prompt for examples. Discuss what each item of PPE is designed to protect and how they are providing protection.

Some suggested PPE relevant for children is provided below:

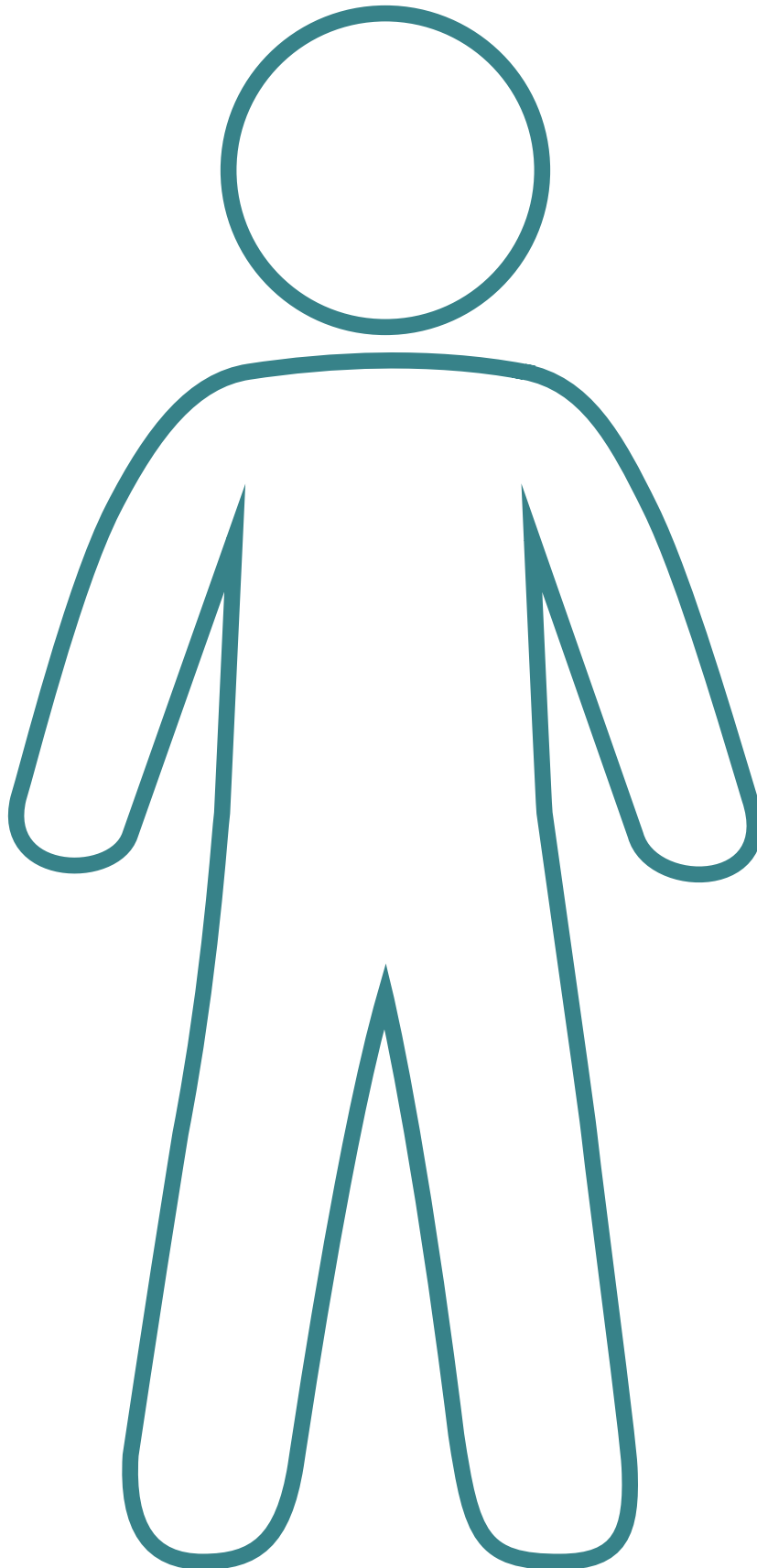
PPE	What it protects	How it protects
Broadbrimmed Hat	Face	Barrier to prevent sun damaging skin and eyes
Sunscreen	Skin	Barrier to prevent sun damaging skin
Earmuffs	Ears	Barrier between noise and the inner ear
Gloves	Hands	Barrier between hot, rough or sharp surfaces or provides grip
Safety glasses	Eyes	Barrier between eyes and hazards
High visibility clothing (Hi-vis)	Whole person	Increases visibility of the person
Face shields	Face	Barrier between face and hazards
Work boots	Feet	Barrier between feet and dangerous surfaces, falling objects, slippery surfaces
Hard hats	Head	Barrier between falling objects or hard surfaces and the skull
Aprons	Front of body	Barrier between body and minor hazards
Overalls	Arms, legs and torso	Barrier between body and minor hazards
Respirators	Lungs and respiratory system	Filters air so it is safe to be breathed in
Helmet	Head	Protects the skull and jaw from injury when falling or running into something

Provide a hard copy of the generic student image or ask students to draw a simple image of a student their age. Alternatively, this could be done on a shared space like a smartboard, whiteboard or large poster page.

Ask students to draw PPE on the student image that is suitable for a visit to a farm. You could suggest a particular type of farm or keep it general at this stage, depending on your students' experiences.

Protect your people ...

How would you protect this person with PPE (personal protective equipment)?





Practical activity

On the school farm or alternate location, find a tool or piece of equipment and assess how it could be made safer using the Hierarchy of Control. Take a copy of the Hierarchy of Control with you as you explore the site.

Example - a garden spade:

- Remove: don't use a spade at all – build “no-dig” garden beds.
- Swap: use something safer like a hand trowel or ask an experienced adult to use a cultivator or rotary hoe.
- Organise: check the handle has a good grip and the blade is securely attached.
- Direct: demonstrate and put up signs reminding people how to use and store spades safely.
- Cover: wear sturdy enclosed shoes and gloves

Encourage students to suggest and implement safety strategies in consultation with key people such as grounds and teaching staff.



Dairy safety

The dairy safety sequence includes the following components:

1. Pre-video display and discussion
2. Dairy safety video
3. Post-video discussion
4. Classroom activity: role play, writing activity
5. Practical activity: safe play areas map



Pre-video preparation

Display a selection of dairy products and identify familiar dairy products used at home.

Discuss the concept of a dairy as a special type of farm and lead students to consider what happens at a dairy. Watch for common misconceptions about dairy cows such as frequency of milking (usually twice per day) and what triggers lactation (in order to produce milk, the cows need to have a calf first). Lead students to consider what they might expect to see in the video about dairy equipment, animals, workers and safety considerations.



KEY SAFETY MESSAGE

= 4Ps: **Protect your People**, large animals, water safety (effluent ponds / dams), electric fences, hay bales, machinery, zoonoses, manual handling, clean boots, PPE

bit.ly/PPSA-DairySafety



Post-video discussion

Check with students for understanding of key concepts featured in the dairy video:

4Ps – identify where the students could see each of the **Protect your People** ideas in action:

- Pair up and plan – Ros chatting with the students before they entered the farm, showing them the farm map; Ros giving instructions about washing up and staying out of the pens.
- Pause and practice – in the calf shed, discussing the job and thinking about the safe way to feed them; Ros showing the electric fence testing; Billy saying they should stop and think about playing on the hay bales; cleaning the trough – Ros demonstrated then invited Henry to join in.
- Play in safe areas – looking at the farm map, not playing in the farmyard.
- Pop on PPE – hats, hi-vis, sturdy shoes.

Bioresecurity – the children in the video are shown using a footbath before they leave the house yard and enter the farm. Prompt students to consider that this is for preventing the entry of diseases that affect cattle on to the farm. Examples include leptospirosis (can cause serious illness in cattle and humans) and foot and mouth disease (not in Australia but one to bring to the student's attention as a possible threat to Australian livestock industries). Discuss other measures farmers use to prevent diseases and pests like vaccinations, control of visitors, hygiene, breeding for resistance, quarantine of animals, boundary fences and washing of trucks and trailers used to transport animals and feed.

Electric fences. Highlight how an electric fence looks different to a normal fence and that the electrical current can't be seen.

Working with large animals – dangers include unpredictability, size and strength, aggressive behaviour due to protective instincts and testosterone, being startled, frightened or cornered, flight zones, inadequate yards and handling areas, inexperienced handlers.

Hay bale safety – haystacks are not safe play areas. Bales can be unstable and can fall on people – large hay bales can weigh up to 700 kilograms. If children climb on hay bales, they could fall to the ground or down between bales. Machinery like front end loaders or telehandlers are used to move bales and if the farmer does not know children are present, they could be injured.

Water safety is a big issue on farms. Discuss that there are different types of water hazards on farms like troughs, dams, water tanks, effluent ponds (like the one in the video), spray tanks, irrigation systems, rivers and creeks, swimming pools and spas. Highlight the number of children who drown on farms each year in Australia –76 children have drowned on farms since 2001 (Source: *FarmSafe Australia FarmSafe_SaferFarmsReport2022.pdf* (storage.googleapis.com)).

Prompt students to consider why supervision has a really important role in water safety, even when hazards are fenced and signs are displayed. Consider that “a child can drown silently in as little as three centimetres of water in less than two minutes”. Source: KidSafe SA Water Safety | Kidsafe SA .



Classroom activity

Work in pairs and role play how they might say NO to a friend who is going to do something dangerous on a farm – how can we Protect Our People?

Invite your students to imagine they are dairy farmer Ros and write a letter, Stock Journal article, Facebook or Instagram post explaining how she has made her farm safe for children. Alternatively, students could write a narrative from Billy, Henry or Charlotte's perspective on visiting Ros the dairy farmer to see how she has made her farm safe for children.

For any of the formats, encourage students to identify feelings and emotions as well as practical actions. Adding a storytelling element will create more engaging content and personalise the concepts.

Provide examples of each format to guide students in their structure and length and to identify and write appropriately for the target audience. To extend the activity, students could include illustrations, images or diagrams to help communicate their ideas.



Practical activity

Provide students with a copy of the school map or print an aerial image from a maps app, including the school farm if relevant. In pairs, walk around the school site with the map locating and marking safe play areas on it. Encourage pairs to compare their maps and discuss what makes a play area safe (prompt for fences, supervision, visibility, shelter, safe equipment, no water, machinery or other hazards).



Grains safety

The grains safety sequence includes the following components:

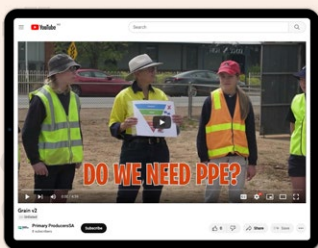
1. Pre-video display and discussion
2. Grains safety video
3. Post-video discussion
4. Classroom activity: chemical safety worksheet
5. Practical activity: school farm safety audit



Pre-video preparation

Display a selection of grains products and identify familiar grains products used at home. Consider wheat, barley, oats, canola and common legumes like peas, lentils and chickpeas.

Discuss the concept of grain production, leading students to consider what happens on a grain farm. Watch for misconceptions about how long a crop takes to grow (usually 6-7 months) and which part of the plant produces the grain (usually in a head for cereals, pods for legumes and canola). Lead students to consider what they might expect to see in the video about grains equipment (e.g. tractors, augers, silos, harvesters), workers and safety considerations.



KEY SAFETY MESSAGE
= 4Ps: Protect your People,
Hierarchy of Control, chemicals,
augers, silos, powerlines, quad
bikes, machinery, workshops

bit.ly/PPSA-GrainsSafety



Post-video discussion

Encourage students to identify examples of the 4Ps to Protect your People shown in the video.

- Pair up and plan – Sue chatting with the students before they entered the school farm, Sue and David talking with the students near the auger, children supervised while David was driving the tractor and operating the auger.
- Pause and practice – discussing what makes tractors and other machinery so dangerous for children (the machinery's size and power, children are difficult to see from the tractor, the loud motor means the driver cannot hear children), moving out of the way while David used the auger; discussing the locks on the silos and warning signs and locked door for the chemical shed.
- Play in safe areas – no playing happening on the school farm.
- Pop on PPE – hats, earmuffs, hi-vis, sturdy shoes.

Review the key safety issues for grain farms that were highlighted in the video: powerlines, augers, machinery, silos, chemical sheds and workshops. Discuss the risks and ways to reduce the hazards for children.

Check that students understand the difference between quad bikes (also known as ATVs – all terrain vehicles – four-wheeled motorbikes with handlebars and a seat the operator straddles) and side-by-sides (also known as UTVs – utility terrain vehicles – four-wheeled vehicles with a steering wheel, seat belts, rollover protection and adjacent seats for a passenger). Encourage comparison of both vehicles for safety and usefulness on farms.

Discuss how age and experience of children can influence their safety on farms. The data from FarmSafe Australia's Safer Farms 2022 Agricultural Injury and Fatality Trend Report, *Safer farms, safer farmers* shows younger children are most at risk of fatal injuries. Prompt students to consider why males are at higher risk than females for all age groups.



Classroom activity

Most farms have chemicals that are required for their farm management and grain farms are known for this (consider why – prompt for herbicides for weed control, fungicides for disease treatment and prevention and insecticides for pest species used across large areas of land). Chemical storage can be a safety risk for children.

Provide students with a hard or digital copy of the worksheet on chemical safety to be completed individually.

Chemical safety on farms

1. **Define** at least five of the farm chemical terms in your own words:

Chemical	<i>A substance that is used on farms for a particular purpose; usually a liquid but can be powders, granules or gases.</i>
Chemical shed	<i>A shed used to store chemicals. Should be lockable, have warning signs, good ventilation and a bunded floor to contain any spills.</i>
Ventilation	<i>Air flow through a closed space like a shed.</i>
Flammable	<i>Able to catch on fire easily.</i>
Toxic	<i>Poisonous.</i>
Poison	<i>A substance used to kill a plant or animal.</i>
Herbicide	<i>A chemical used to kill weeds like ryegrass.</i>
Fungicide	<i>A chemical used to kill fungal diseases like stem rust.</i>
Insecticide	<i>A chemical used to kill insect pests like Russian wheat aphid.</i>
Pesticide	<i>A chemical used to kill pests – can include insecticides but also mice baits, fox baits.</i>



Classroom activity, cont...

- In the video, Molly points out the warning signs on the chemical shed. List the things that the signs warned people about. *Flammable substances, toxic poisons.*
- While visiting a farm, you find a chemical storage shed unlocked. **Explain** what you should do. *Do not go in the shed. Tell the adult who is supervising you.*
- The Hierarchy of Control has five steps: Remove, Swap, Organise, Direct and Cover. **Describe** how each step can be used to make chemical storage safer for children.

Remove	<i>Don't store any chemicals at all (discuss the practicality of this suggestion). Dispose of any leftover chemicals as soon as they are no longer needed.</i>
Swap	<i>Use alternatives that are low toxicity. Buy smaller containers so there are no leftovers to store.</i>
Organise	<i>Locks on the shed, with key stored in a different location. Ventilation spinners to remove fumes. Bunded floor (concrete with a low wall all around the edge) to contain spills. Lockable cages inside the shed to lock chemicals in. Chemicals stored on high shelves out of reach of children. Chemicals always stored in their correct containers with labels intact.</i>
Direct	<i>Warning signs on shed. Provide chemical safety training for workers. MSDS provided for each chemical being stored – these contain all the safety and first aid information needed.</i>
Cover	<i>For workers using chemicals:</i> <ul style="list-style-type: none"> ▪ gloves ▪ face masks ▪ overalls ▪ aprons ▪ ventilators <i>Make sure there is a wash station including a safety shower nearby to wash any chemicals off. Children should not need these because they should not be handling chemicals.</i>

NOTE: Remind students that in workshops, bottles / containers may not be marked with the right label or may have lost their label. Do not eat or drink from any bottle unless it has come from a carer or parent, and it is safe.

- Imagine** you have been asked to design a new chemical shed for a school farm. Draw a sketch of the shed showing all the safety features you have included.
Encourage students to include locks, signs, ventilation, safety shower, labels for containers, bunded floor as minimum.



Practical activity

Take the students for a walk through the school farm or alternate location. Complete a school farm safety audit and create a list of safety jobs that should be done. Divide them up between the class to be followed up on. Some safety actions may be the responsibility of grounds staff but there are many simple actions that students can follow up including making simple warning signs (e.g. "Watch for bees, snakes and spiders in this area!"), tidying up cluttered work spaces or providing soap and a towel at a handwash station.

Students could create an audit checklist before they begin or use the walk through to create one for future checks. The South Australian Department for Education has a safety inspection for agriculture form that can be used as a guide. See pages 29 and 30.



Site name & ID number: _____

Employee name: _____ Position: _____ Date: _____

General	Y / N / NA
Are buildings locked when not in use to prevent unauthorised access?	
Is all fixed machinery and equipment isolated by padlock when not in use and unlocked only prior to use?	
Is all machinery and equipment in good repair?	
Is personal protective equipment available, stored hygienically and in good condition?	
Are risk assessments and safe operating procedures current (within 3 years) and have they been reviewed by all employees in the work area?	
Are safe operating procedures displayed near fixed and stationary machinery and equipment?	
Is there a training record of all students who use machinery and equipment?	
Is there signage that clearly identifies overhead power lines in areas where augers, field bins and other machinery operate?	
Are lifting chains and shackles in good repair?	
Are jacks, stands, ramps, trolleys and hoists available to lift heavy loads; with the safe working load clearly marked?	
Are all quad bike operators fully trained in AHCMOM212 – Operate quad bikes?	

Emergency first aid	Y / N / NA
Are fire extinguishers accessible?	
Have fire extinguishers been tested within the past 6 months?	
Are fire exit doors: clear of obstructions; clearly identified; and easy to open from the inside?	
Are first aid kits/supplies clearly identified with a green and white first aid sign?	
Are first aid kits accessible and restocked within the past 6 months?	
Are emergency alarms audible in all internal areas?	

Infection control	Y / N / NA
Are hand washing and sanitation troughs available and in good repair?	
Is a sharps disposal container available?	

Falls	Y / N / NA
Is access to silos restricted to prevent unauthorised access?	
Are silos in good condition with no signs of rust or visible strain/contortion of vessel?	



Chemicals	Y / N / NA
Are hazardous chemical safety data sheets current (within 5 years) and readily accessible?	
Are hazardous chemicals clearly labelled with legible instructions for use?	
Are flammable, combustible and corrosive chemicals segregated in secured, ventilated cabinets away from ignition sources?	
Are chemical groups, eg flammables, poisons, herbicides and insecticides, separated from each other?	
Are processes in place, including spill kits, to manage hazardous chemical spills?	
Are trucks, utes and trailers with chemicals stowed locked when unattended to prevent unauthorised access?	
Is diesel and fuel stored in the original 240L drums or tanks and protected with adequate barriers to prevent vehicular collision?	
Are overhead fuel tanks, supports, fuel taps, clamps, hoses and nozzles in good repair, free from any modifications?	

Note: The completed checklist must be retained for a period of 10 years. (General disposal schedule 30)

Comments:

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Livestock safety

The livestock safety sequence includes the following components:

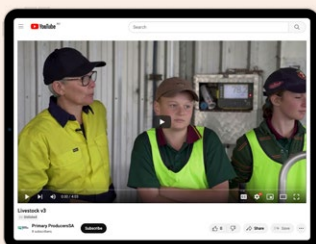
1. Pre-video display and discussion
2. Livestock safety video
3. Post-video discussion
4. Classroom activity: 4Ps: Protect Your People poster or logo design
5. Practical activity: Pause & Practice working with animals or manual handling



Pre-video preparation

Display a selection of livestock (e.g. sheep, cattle, pigs) products and identify familiar livestock products used at home. Consider meat, wool and leather products. Dairy products have been discussed as part of the dairy sequence but it is worth noting that sheep can also be a source of dairy products such as feta cheese.

Discuss the concept of livestock as a specific type of farming and lead students to consider what happens on livestock farms. Watch for common misconceptions. Lead students to consider what they might expect to see in the video about livestock equipment, animals, workers and safety considerations.



KEY SAFETY MESSAGE
= 4Ps: Protect your People,
working with large animals,
quad bikes, guns, zoonoses

bit.ly/PPSA-LivestockSafety



Post-video discussion

Following on from the dairy sequence, review the factors that can make livestock dangerous. These include unpredictability, size and strength, aggressive behaviour due to protective instincts (they can kick and buck) and testosterone, being startled, frightened or cornered, flight zones, inadequate yards and handling areas, inexperienced handlers.

Zoonoses – diseases that can be transferred between animals and humans such as leptospirosis and Q fever – and parasites like hydatids are other important safety considerations when handling livestock. Encourage students to consider the ways to protect themselves against diseases and pests from animals. Prompt for hand and yard hygiene, gloves, sturdy, enclosed footwear, covering open wounds, vaccinations. Page 61-63 of the Farmers' Guidebook to work health and safety has more details.

Encourage students to consider and compare different livestock types including sheep, pigs, cattle and horses. Remind students that horses are the cause of more deaths and serious injuries for children than any other livestock type and encourage them to consider the reasons for this. Dogs can also be included in the discussion.

The topic of guns can be tricky but the reality is that many farmers are licensed and do own guns. Obviously, they are a serious safety risk. Reinforce that guns are never for children and that they must be locked away in a gun safe, by law. If children see a gun not secured properly on a farm they must not touch it and tell an adult straight away.



Classroom activity

This activity will require creativity and design skills to promote the **4Ps: Protect your People** concept. Providing students with choices about the design task and their presentation format will accommodate individual strengths.

Create a farm workshop poster or logo for a hi-vis farm shirt that promotes the 4Ps for safety.

Students could design by hand or digitally. PowerPoint can be a useful format for creating posters and infographics.



Practical activity

Use the Pause and Practice strategy to develop safe work skills.

- If the school has livestock, students could plan and carry out **safe livestock handling** with their teacher (low-stress handling using natural instincts, efficient yard and pen setups, staying out of the pen where possible, using small groups of livestock. See Page 57-60 of the Farmers' Guidebook for tips)
- If the school does not have livestock, students could plan and carry out **safe manual handling** with their teacher (lifting using techniques like shared loads, tools such as sack trucks, storage at waist height, not on the ground or above the head. See page 68 of the Farmers' Guidebook).

[Farmers' Guidebook to work health and safety \(safework.sa.gov.au\)](http://safework.sa.gov.au)

Don't forget to Pair up and Plan and Pop on PPE before any practical activities.

Horticulture safety

The horticulture safety sequence includes the following components:

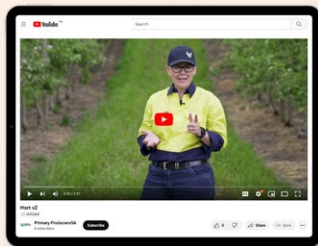
1. Pre-video display and discussion
2. Horticulture safety video
3. Post-video discussion and classroom activity: responding to video questions
4. Practical activity: risk assessments



Pre-video preparation

Display a selection of horticulture products and identify familiar horticulture products used at home.

Discuss the concept of horticulture as the farming of fruits, nuts and vegetables and lead students to consider what happens on horticultural properties. Watch for misconceptions. Lead students to consider what they might expect to see in the video about horticulture equipment, orchards, glasshouses and paddocks, workers and safety considerations.



KEY SAFETY MESSAGE
= 4Ps: Protect your People,
noise, forklifts, heights,
working outdoors, worker
safety in busy areas

bit.ly/PPSA-HorticultureSafety



Post-video discussion and classroom activity

During this video, students are asked a series of questions. You may elect to watch the video through entirely then go back to consider the questions, pausing after each one.



Allow students time to respond to the questions posed in the horticulture video. This combined post-video discussion and learning activity would work well in small groups, with responses brainstormed and recorded on a shared format like butchers paper, white board tables or a digital platform. Include time for groups to share their thoughts back to the class.

You could also allocate each group just one of the questions to respond to, then share their ideas back to the whole class for discussion.

Transcript of horticulture video questions and suggested responses

Hi I'm Sue. This is one of seven videos we've made about farm safety. We hope you get some great tips on how to protect your people and stay safe on your school farm, on your family farm or on a farm you may be visiting.

This farm safety video is a bit different. I'm going to use it to ask you some questions and use your learning about farm safety in a different setting. Your teacher can pause the video and help you think about the answers.

I'm at a really busy orchard today. Can you guess what they grow here?

Apples and cherries

And do you know what the name is for the type of farming where you grow fruits and vegetables?

Horticulture

How many different fruits and vegetables can you name? Can you think of one for every letter of the alphabet?

Consider creating a class A-Z list.

Horticulture is an amazing type of farming. They have to harvest the fruits and vegetables, package them up and get them to the consumers – that's you – while they're still fresh and free of bruises.

You might remember our rules to protect our people.

Will there be the same rules that we use here compared to some of the other farms that we've visited and what might be different on a horticulture farm compared to say a dairy or a grain farm?

The 4Ps to Protect your People are still needed. Similar dangers exist such as water safety, machinery, quad bikes, chemicals, heights, working outdoors, noise, manual handling, powerlines. There probably won't be large animals and zoonoses.

It's great working outdoors but what are some of the safety risks for being outside?

Sun exposure, extreme weather (heat, cold, wind, lightning), snakes and stingers, slips, trips and falls.

And what can we do to safely pick the fruit that's up high? You might be able to invent a clever method to do that.

In horticultural businesses, special ladders called bow ladders are sometimes used. They are more stable than ordinary ladders. Further information is available at: <https://www.safework.sa.gov.au/industry/agriculture/bow-ladders>

If forklifts are used to lift a person, they must be fitted with a purpose-built work platform that has the correct safety guards. Further information is available at: <https://www.safework.sa.gov.au/workplaces/plant-tools-and-vehicles/forklifts>

Pruning trees so that they don't grow too tall or too wide also helps with safe fruit picking.

We're in the packing shed. It's one of the busiest parts of the farm. There's a lot going on in here and it's quite noisy as well. Can you see why it's not a safe play area for kids?

Noise, busy work areas, machinery, forklifts, elevated areas, no supervision or fenced safe play space. Remind students that adults go through a range of training programs and

certifications to ensure they are safe operators in a business, and that business owners have strict responsibilities to protect their staff. Staff must operate machinery etc in accordance with a safe operating procedure. Remind students that education is lifelong and that safety education is a key part of protecting people.

On this farm they're using forklifts to help pack their fruit. Do you think there's some special safety rules around forklifts? Like do you have to have a license to drive a forklift?

According to SafeWork SA ([Forklifts](#) | [SafeWork SA](#)): Forklift operators must be 18 years of age to hold a Licence to Perform High Risk Work which allows them to operate a forklift.

Before applying for this licence, they must undertake training and assessment with a Registered Training Organisation.

When using a forklift follow safe work practices such as:

- Observing speed limits and warning signs
- Wearing correctly fitted seat belts
- Slowing down
- Sounding the horn at an intersection or when others are around

Further information about safe operation of forklifts is available at: <https://www.safework.sa.gov.au/workplaces/plant-tools-and-vehicles/forklifts>

What are some of the other ways that they're keeping their workers safe in this packing shed?

- Hearing protection
- Warning signs
- Gloves
- Hi vis clothes
- Yellow lines painted for walkways
- Elevated walkways
- Clear work areas
- Emergency stop buttons
- Hazard lights and buzzers
- Yellow safety rails
- Fire extinguishers and hoses
- Rolling racks for shifting heavy boxes
- Offering training and inductions

Ask students to consider who is responsible for safety on farms. Lead them to conclude that everyone has to decide to work safely and all employees and managers are responsible for contributing to a safe workplace. When it comes to children on farms, adults must be responsible in supervising them and making sure they are safe. Remind students that while it is fun to visit a farm, and that there are great careers in farming, we must always protect ourselves, our friends and our families.

In some businesses there can be workplace safety officers and many farmers seek safety advice from specialists in fields such as machinery, livestock and chemicals. Farmers can undertake training in safe work through tertiary study and short courses like the ChemCert for chemical use and Licence to Perform High Risk Work for forklift operation.

So if you visit a fruit or vegetable farm remember the ways that we protect your people: pair up and plan, pause and practice, play in safe areas and pop on your PPE.



Practical activity

While in the school farm or other outdoor space, complete a risk assessment for working outdoors. Encourage students to consider sun, weather hazards, snakes, stingers like bees and spiders, slips, trips and falls. Locating a first aid kit and safe play zones, describing safe ways to conduct activities and to reduce risk in outdoor work and play areas, and identifying suitable PPE will be important risk controls.

The South Australian Department for Education has a simple risk assessment template that can be used or you could create your own. *See pages 36 and 37.*



Risk Assessment Template

WHS Generic RA

Site name and ID No			
Title, description and location of activity			
Example: Working bee – volunteers undertaking gardening on weekend			
Risk Assessment done by:	Name	Position	Review Due (3 years)

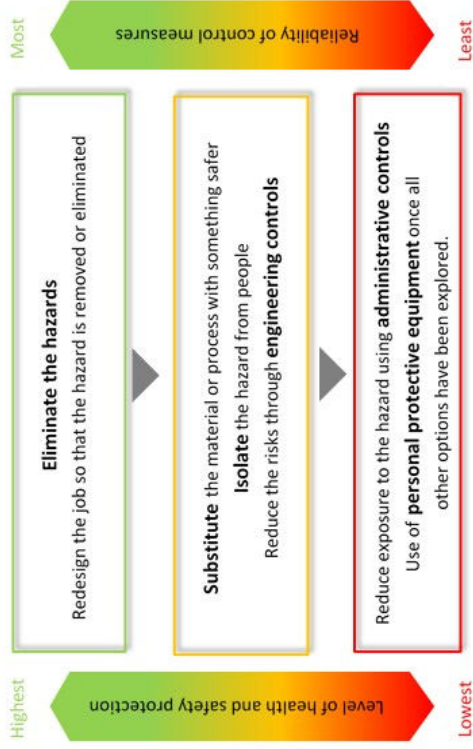
Hazard identification (What is the issue of concern?)	Risk Controls (What are you doing to eliminate or reduce the risk?)	Risk (With all controls in place)
E.g. Handling potting mix and dust inhalation	<ul style="list-style-type: none"> Use of PPE – gloves, glasses, and dust mask 	Low
E.g. Use of sharp tools when hedging and trimming plants	<ul style="list-style-type: none"> Garden tools – battery or hand operated only 	Low



Risk management – What you need to do!

Step 1: Have a look at [WHS safety management](#) intranet and see if there are any activity hazards that are not already covered.

Step 2: Identify controls for your remaining hazards. Use the hierarchy of control chart to help select controls that provide the highest level of protection to employees.



Step 3: Assess the level of risk for the remaining hazards with all controls in place.

WHS Risk Assessment Matrix	Consequences					
	First aid, Personal support or counselling.	Medical or dental treatment.	Hospital emergency department (Out-patient)	Admitted to Hospital (In-patient)	Death, permanent disabling injury	
Certain: to occur at some stage	Medium	High	High	Extreme	Extreme	
Likely: to occur	Low	High	High	Extreme	Extreme	
Possible: could reasonably occur	Low	Medium	Medium	High	Extreme	
Unlikely: to occur	Low	Low	Medium	High	Extreme	
Rare: not expected to occur	Low	Low	Medium	Medium	High	

Step 4: Check the assessed risk level and undertake the associated action.

Extreme	<p>Do not undertake the activity</p> <ul style="list-style-type: none"> Contact the Work Health and Safety team on Education.WHS@sa.gov.au or on 8226 1440 for guidance on risk reduction Consult with workgroup Health and Safety Representative where available
High	<p>Reduce the risk as far as reasonably practicable</p> <ul style="list-style-type: none"> Escalate to site leader and/or local safety/ management committee for review Consult with workgroup Health and Safety Representative and affected parties Review department WHS safety management intranet for control requirements
Medium	<p>Activity may be undertaken</p> <ul style="list-style-type: none"> Consider ways to further reduce the risk and review the department WHS safety management intranet Consult with workgroup Health and Safety Representative or affected parties
Low	<p>Activity may be undertaken safely</p> <ul style="list-style-type: none"> Monitor the activity and controls to ensure the risk remains low



Viticulture safety

The viticulture safety sequence includes the following components:

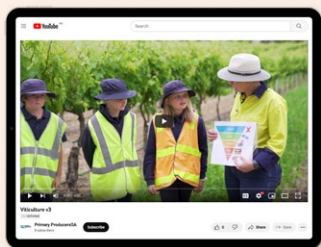
1. Pre-video display and discussion
2. Viticulture safety video
3. Post-video discussion
4. Classroom activity: SOLO farm machinery and vehicle safety
5. Practical activity: school vehicle safety assessment



Pre-video preparation

Display a selection of viticulture products including wine, verjuice and vinegar (note your school's policy in talking about wine to students).

Discuss the concept of viticulture as a special type of farming and lead students to consider what happens on a vineyard. Watch for common misconceptions such as viticulture being different to horticulture (it is a specialist sub-type of horticulture). Lead students to consider what they might expect to see in the video about viticulture equipment, vineyards, workers and safety considerations. Students may know that regions in South Australia grow grapes.



KEY SAFETY MESSAGE
= 4Ps: Protect your People, Hierarchy of Control, quad bikes, machinery, working outdoors, water safety, hand tools, uneven terrain.

bit.ly/PPSA-ViticultureSafety



Post-video discussion

Lead into a discussion with the students by providing these facts:

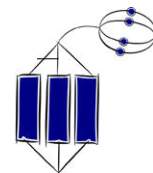
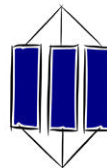
- Since 2001, 269 people have died on farms as a result of quad bikes, almost half due to rollovers. Of these fatalities, 32 were children. In addition, it is estimated that, on average, six people every day require treatment in hospital emergency departments due to quad bike injuries.
- Quad bikes are an important topic to discuss with students as they are commonly found on all types of farms and many people will not realise the danger or the recommendations for using them safely.
- Children should not ride or be a passenger on quad bikes until they are 16 years old. Quad bikes should be fitted with operator protective devices (OPDs) and riders must wear helmets.
Source: <https://www.farmsafe.org.au/quad-regulation-myths-and-facts>
- Farm utes, cars, motorbikes and machinery also contribute to injuries and deaths of children on farms by being run over or unrestrained in or on the vehicle.



Classroom activity

This activity emphasises the risks of farm vehicles and machinery for children. Students can select (or be directed to) the activities from the Structure of Observed Learning Outcomes (SOLO) grid that matches their learning style and strengths. For more information about the SOLO taxonomy see: [A teacher's guide to SOLO Taxonomy \(structural-learning.com\)](#).

Teachers can determine the parameters for this activity by setting a timeframe, a total number of tasks, or combination of activity types (e.g. at least one from each column in the grid). Alternatively, they can negotiate individual contracts with each student.



Unistructural	Multistructural	Relational	Extended Abstract
Define these terms: <ul style="list-style-type: none"> • Quad bike • Side-by-side • Motorbike 	Describe the dangers of farm utes for children	Explain why quad bikes are especially dangerous for children	Create an original jingle, poem or narrative to encourage farmers to keep kids safe from machinery on farms
Identify the types of machinery used on farms	List the things farmers can do to keep kids safe from machinery	Compare quad bikes, side-by-sides and motorbikes from a safety perspective	Evaluate the effectiveness of quad bike safety recommendations
Label the dangers on a drawing or image of a piece of farm machinery	Calculate how many people are injured by quad bikes each year if an average of six people per day go to hospital. Show your working out!	Analyse the ways farms are different to other workplaces with respect to child safety	Reflect on the reasons why some people let their kids ride unrestrained in or on farm utes



Practical activity

Assess the school site and, where possible, school farm for vehicle and machinery safety. Are there warning signs displayed on the farm, car parks, bus stops and pedestrian crossings? Identify the areas that need kid-friendly safety directions displayed, then create and install them.



Forestry safety

The forestry safety sequence includes the following components:

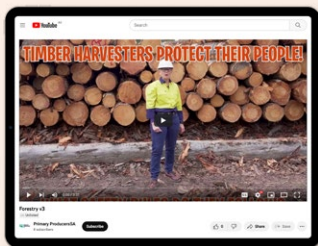
1. Pre-video display and discussion
2. Forestry safety video
3. Post-video discussion
4. Classroom activity: design a kid-safe farmyard
5. Practical activity: play Safety Spotto



Pre-video preparation

Display a selection of forestry products and identify familiar forestry products used at home.

Discuss the concept of a plantation as a special type of farm and lead students to consider what happens on a plantation. Watch for common misconceptions. Lead students to consider what they might expect to see in the video about forestry equipment, plantations, workers and safety considerations.



KEY SAFETY MESSAGE
= forestry harvesters, safe operation and PPE for chainsaws

bit.ly/PPSA-ForestrySafety



Post-video discussion

During this video, students are asked a series of questions. You may elect to watch the video through entirely then go back to consider the questions, pausing after each one.

Allow students time to respond to the questions posed in the forestry video. This combined post-video discussion and learning activity would work well in small groups, with responses brainstormed and recorded on a shared format like butchers paper, white board tables or a digital platform. Include time for groups to share their thoughts back to the class.

You could also allocate each group just one of the questions to respond to, then share their ideas back to the whole class for discussion.

Transcript of forestry video questions and suggested responses

Hi I'm Sue. This is one of seven videos we've made about farm safety. We hope you get some great tips on how to protect your people and stay safe on your school farm, on your family farm or on a farm you may be visiting.

This farm safety video is a bit different. I'm going to use it to ask you lots of questions and use your learning about farm safety in a different setting. Your teacher can pause the video and help you discuss the answers.

I'm at a sawmill showing some of the products of the forestry industry. The trees that produced this timber are grown on a type of farm called a plantation. It's very different to some of the other farms that we've visited. It's a really important industry because it produces all of the building materials that we need and the paper products that we use but did you know that some of the products are also used in potting mixes that we grow vegetables in?

Can you think of other things that we use timber for?
Furniture, floorboards, fenceposts, building materials, tissues, printing and writing papers, newsprint and packaging papers, nappies, paper towel.

Most plantations are owned by companies but some are family farms. We've been given some special footage to share with you to show you what happens on plantations.

Do you know how they harvest the timber?

Class discussion.

You may know what a chainsaw looks like but on plantations they use a special harvester that has an enormous chain driven saw. The contractors who use it have to have special training and are very skilled at what they do. They have to have special rules to follow as well. While you watch the video see if you can see the four P's in action to protect your people.

I wonder if they use the same ones that we do?

Class opinions.

Guide students to identify the safety risks for harvesting trees. The obvious one is falling trees but "chainshot" (being injured by a piece of chain breaking free from the harvester) is a key risk. These reasons are why people must never be standing near harvesters while they are working and why they have to have reinforced and completely enclosed cabins. Additionally, harvester maintenance and safety checks are crucial.

Did you see those huge machines? Aren't they incredible? I wonder how fast that chain is going and how many trees they can chop down in one day?

The chain moves at 40 metres per second.

Suggest that you time how long it takes for one tree to be cut down in the video and then work out how many per hour. Rough guide – one tree takes less than a minute.

Timber harvesters are very careful when they work. They protect their people. I wonder what the safety rules are that they have to follow. How do you think the operators pair up and plan?

No bystanders. Workers on plantations have to record their work plans for a day and identify where and when they will be working to keep people away. They use radio communication.

Do you think the timber harvesters pause and practice?

Special training and supervision is required. Safety checks on all equipment. Workers check out a site carefully for hazards like uneven ground and damaged trees that may not cut as expected.

I can't imagine that there'd be any safe play areas on a plantation.

No, there isn't when work like harvesting is happening! Many companies do allow people to enjoy their forests for recreation like walking and birdwatching but only if there is no work happening. They will put up warning signs and restrict access to areas when it is not safe for visitors. This link gives you an example: [Enjoy the forests this spring, but take care | OneFortyOne](#)

and I wonder what PPE they require?

The harvester cabins provide protection from chainshot and falling objects as well as from noise and weather exposure. Workers need hard hats, hi-vis gear, work boots, eye protection.

You might have been to farms that aren't plantations but where they still have to deal with trees. Sometimes if a tree falls over a fence they'll have to use a chainsaw to help remove it. What would be some safety rules for operating a chainsaw?

Never for children to use. Before using one, do a chainsaw course to learn the safe techniques. Keep people away while cutting. Wear all the PPE including double eye protection (glasses plus face shield). Make sure the timber is stable before cutting it and that there is a safe zone for it to fall. Make sure the chainsaw matches the size of the timber being cut. Make sure the chainsaw is well maintained, the chain is sharp and all the guards and protective features are in place. Never operate from a ladder or above shoulder height. Don't work alone.

When anyone uses a chainsaw there's special PPE required. This shot shows a complete kit of chainsaw safety gear. The safety gear for chainsaws includes eye protection, hearing protection, chaps for their legs and sometimes a full face shield as well and of course they'd need special boots to wear for that job.

Is there any other PPE that they would require?

Check for hearing protection, hard hat, gloves, steel capped boots, chaps, eye protection- remind students that double eye protection is the best – safety glasses plus a face shield. Long sleeved tops and long pants.

Next time you visit a farm, enjoy the beautiful trees and think about what an amazing resource they are for us and the environment ... and stay safe. Protect your people!



Classroom activity

This final classroom activity will combine the key safety concepts for children presented and explored throughout the farm safety project.

Students are to design a child-safe farmyard. They could create 2D floor plans using pen and paper, use Minecraft or build a 3D model. Their design should showcase the **4Ps: Protect your People** principles and utilise the Hierarchy of Control to reduce risky areas common to farms. Providing some informative labels or recording a commentary to accompany the design will help students to communicate their learning about keeping children safe on farms.












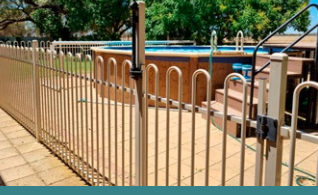
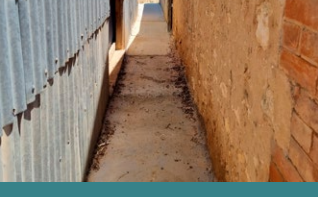

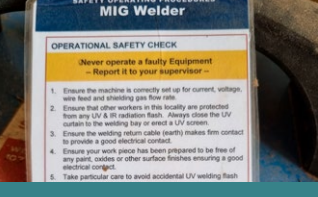

The FarmSafe Australia document Child safety on farms may be useful for students to consider when planning their child safe farm layout.

[Microsoft Word - Child Safety on Farms Information Sheet - October 2014.docx \(storage.googleapis.com\)](https://storage.googleapis.com/microsoft-word-child-safety-on-farms-information-sheet-october-2014.docx)



Practical activity

Using the school site or school farm, play "Safety Spotto" using the grid provided.

SAFETY SPOTTO			
			
Pair up and plan (adults working with students)	Pause and practice (students practicing skills)	Playing in safe areas	PPE being used
			
Fire extinguisher	Guard on a machine	Safe chemical storage	Safety sign
			
Hand wash facility	Tidy work area	First aid kit	Safety fencing
			
Clear walkway	Equipment for heavy loads	Safety instructions	Hand sanitiser

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FARM SAFETY

PROJECT



Australian Government
Department of Agriculture,
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DELIVERED BY: **agcommunicators.**