

## Toolbox Talks



### We all need to remember

- If you are unsure of anything or feel that something you have been asked to do is dangerous, DO NOT begin the task. ASK for assistance or more information and we will work together to find a safe way to do the job or solve the problem.
- Ensure you are aware of the location of the nearest First Aid Kit.
- Make sure everyone is fit for work, free from signs of fatigue, drugs or alcohol. If in doubt, ask or talk to your manager.
- This farm is a workplace, but may also be a place of residence for the owner, their managers and employees. Be vigilant for children and bystanders at all times. Refer to *Child Safety on Farms*.
- The safety, health and wellbeing of all who live on, work on and visit this farm is the most important responsibility we all share.

Even if we are busy and under time or financial pressures, safety MUST come first.



**emergencyplus**

Save the App that could save your life.

### EMERGENCY CONTACTS

**In case of emergency, CALL 000 or your local emergency service provider, then call your manager or supervisor.**

**POISONS 13 11 26**  
Poisons Information Centre

### A Practical Guide

# Quad Bike & Side-by-Side Vehicle (SSV) Operation

Quad Bikes and SSVs are very versatile and convenient items of plant used on farms. Their ability to carry loads, tow trailers, and simple to understand operation make them a popular choice for conducting a range of farm tasks. These versatile vehicles are commonly used in agriculture but can pose serious dangers if not operated safely and responsibly.

## The Hazards and Risks

Quad bikes and SSVs used in farming operations tend to be larger and heavier than their recreational counterparts but they are still capable of traveling at significant speeds. While quad bikes and SSVs share some safety concerns, such as the risk of rollovers, the differences in design and purpose of each vehicle mean that they also have some distinct hazards and safety considerations. Operators must be aware of these differences and follow the appropriate safety guidelines and measures specific to the vehicle they are using.

### Quad bike and SSV Harms

The two most common causes of fatal injury related to quad bikes and SSVs are head and neck injuries after being ejected from the machine and crush injuries from machine rollover. The most common non-fatal injuries are traumatic brain injuries, spinal cord injuries, crush injuries to internal organs and body parts, broken bones in legs, and feet and tissue damage. These injuries are received predominantly by being ejected from, rolled over by, run over, or struck by a quad bike or side-by-side vehicle.

## Reducing the Risks

### Seek Formal Training

Due to their ease of operation, formal training of quad bike operations tends to be overlooked. Initial training and refresher courses should be conducted by experienced and qualified instructors who understand the specific challenges of quad bike operation. Training should include the use of active riding techniques.

### Use Active Riding Techniques when Operating Quad Bikes

Active riding refers to a set of techniques and practices that riders adopt to actively engage with the vehicle and the terrain, enhancing control, stability, and safety. Active riding techniques include the following:

#### Body Positioning

Active riders maintain an engaged stance. They distribute their body weight dynamically, leaning forward when going up slopes, shifting their weight backward going down

slopes, and transferring their weight to the outside foot peg during turning while leaning into the turn. By actively adjusting their body position, they can lower the quad bike's center of gravity, and enhance balance and stability, minimising the risk of roll over.

#### Dynamic Movement

Active riders are dynamic, shifting their body weight as the terrain changes. For instance, when encountering bumps or obstacles, they use their legs as shock absorbers by slightly lifting off the seat, allowing the quad bike to absorb the impact. This minimises jolts to the body and maintains better control.

#### Proper Grip and Control

Active riders maintain a firm yet relaxed grip on the handlebars, allowing them to respond quickly to unexpected terrain changes. They use their arms and shoulders to guide the vehicle, allowing for more precise control.

#### Use of Legs

Active riders use their legs to grip the quad bike's sides, providing additional stability, especially during sharp turns. They also use their legs to absorb shocks and impacts, reducing strain on the upper body.

#### Constant Adjustment

Active riders are constantly adjusting their body position and applying pressure to the footrests. For example, during acceleration, they shift their weight forward, enhancing traction on the front wheels. During braking or descending slopes, they shift their weight back, improving rear-wheel traction.

#### Eyes Up, Head Up

Active riders keep their eyes up and head up, looking ahead at the terrain. This anticipatory vision allows them to prepare for upcoming obstacles or turns, enabling proactive responses and smoother navigation.

### Use Operator Protection Devices (OPDs) on Quad Bikes

OPDs are designed to prevent riders from becoming trapped underneath a quad bike in a rollover situation. OPDs reduce the risk of serious crush injuries and deaths if a quad bike rolls over.

### Avoid Carrying Passengers on Quad Bikes

Single rider quad bikes are not meant to carry passengers. Passengers can affect the weight distribution, increasing the risk of rollover.

## Toolbox Talks

### A Practical Guide Quad Bike & Side-by-Side Vehicle (SSV) Operation

#### Reducing the Risk of Quad Bike and Side-by-Side Vehicle Injuries

**Adhere to Age and Size Limits:** Age limits for quad bikes and SSVs have been set taking into account the cognitive ability of an operator to understand the risks and the physical abilities and characteristics required to reach the controls and use active riding techniques. Children under the age of 16 should not operate or be passengers on quad bikes. Children under the age of 16 should not operate SSVs. If they are passengers, they should be correctly wearing a seatbelt in the cab of the SSV, never riding as passengers in the back tray.

**Maintain Throttle Control:** Modulate the throttle smoothly. Avoid sudden accelerations, which can cause loss of control, especially on slippery or uneven terrain.

**Avoid Excessive Speed:** Adhering to speed limits and using speed limiters can reduce the risk of speed related incidents.

**Practice Safe Braking Techniques:** Braking while cornering can increase the risk of rollover. When operating on slopes the preferred brake to use is the brake on the wheels that are the furthestmost up the slope.

**Gain Cornering Skills:** Avoid sharp turns at high speeds, as quad bikes and SSVs are prone to tipping during fast manoeuvres.

#### Links and Resources

Safety of Quads and Side-by-Side Vehicles on Australian Farms - A Practical Management Guide  
[aghealth.sydney.edu.au/wp-content/uploads/2019/05/Safe\\_Use\\_Of\\_Quads\\_and\\_SSV.pdf](https://aghealth.sydney.edu.au/wp-content/uploads/2019/05/Safe_Use_Of_Quads_and_SSV.pdf)

Quad Bikes in rural workplaces  
[safeworkaustralia.gov.au/system/files/documents/1711/rm\\_workspace\\_-\\_d17-16017\\_quad\\_bikes\\_in\\_rural\\_workplaces\\_info\\_sheet.pdf](https://safeworkaustralia.gov.au/system/files/documents/1711/rm_workspace_-_d17-16017_quad_bikes_in_rural_workplaces_info_sheet.pdf)



**Practice Obstacle Negotiation:** Practice techniques for safely navigating obstacles such as rocks, tree roots, and ditches.

**Use Gears Effectively:** Gears used should match the terrain and speed. Using appropriate gears ensures better control and traction.

**Communicate:** Use clear signals and verbal communication with others, especially in group settings. Effective communication helps prevent collisions and ensures everyone is aware of the vehicle's movements.

**Perform Regular Maintenance Checks:** Conduct pre-ride checks to ensure that the vehicle is in proper working condition. This includes inspecting brakes, lights, and steering. Tyres should be checked using a tyre pressure gauge to ensure uniform and correct inflation pressures. It is not possible to detect differences in tyre pressure visually. Having uneven tyre pressures can increase the risk of roll over.

**Be Aware of Weather Considerations:** Be prepared to adjust riding techniques based on weather conditions. Wet or muddy terrain requires different riding approaches for optimal safety.

**Gain Hands-On Practice:** Learning how to operate a quad bike or SSV takes time. Ensure basic techniques are practiced and ingrained in controlled environments under supervision before attempting to perform complex tasks.

**Understand the Terrain and Machine Limitations:** Assess and adapt to different types of terrain, including slopes, rough surfaces, and obstacles commonly found on farms. Quad bikes and SSVs have varying capabilities. Know the limitations of the machine being operated and how the terrain may impact these.

**Maintain Guards:** Foot guards and plates are fitted to quad bikes to prevent foot and lower leg injury. Removing these plates increases the risk of injury.

**Load Management:** To ensure control and stability of both quad bikes and SSVs any loads must be distributed evenly and be

within the capability of the machine. The terrain to be traversed needs to be considered when planning the safest way to carry a load. The operator's manual will provide machine-specific information on limitations applicable to individual machines. Towed load, attachments, overloading, unbalanced loads, or loads that can shift while in transit can severely impact the braking, stability, and handling of quad bikes and SSV's.

#### Wear Seatbelts when Operating or Riding as a Passenger in SSVs

Seatbelts significantly reduce the risk of ejection from a side-by-side vehicle in the event of a collision or a rollover.

Avoid riding or carrying passengers in the tray of an SSV.

#### Wear Helmets

**Quad Bikes:** Wearing helmets is of paramount importance when operating quad bikes. In the event of an incident, helmets serve as a crucial line of defence, protecting riders from head injuries that can be life-threatening. If a rider is ejected from a quad bike or in the unfortunate event of a rollover, helmets provide a protective cushion, significantly reducing the risk of severe head injuries. By wearing helmets consistently, quad bike operators significantly reduce the potential for severe head injuries.

**Side-by-Side Vehicles:** Helmets are equally crucial when operating side-by-side vehicles (SSVs), especially due to the increased power and speed these vehicles offer. SSVs often operate in rough terrains, where lateral head injuries are a significant concern in the event of a sudden turn or a collision. Unlike quad bikes, SSVs typically have a cabin structure. However, wearing helmets inside SSVs is essential because in the event of a lateral impact or rollover, the head can be jolted forcefully against the sides of the vehicle, or against the head of another passenger, leading to traumatic head injuries. Helmets provide a protective barrier, absorbing and distributing the impact energy, significantly reducing the risk of head injuries.



# Toolbox Talks

## Facilitator Guide

### INSTRUCTIONS

The information sheet is background information ONLY. Be sure to customise your talk to your operation and facilities.

#### How to deliver an effective Toolbox Talk

- Know your Topic. If you don't understand the material it will be hard to explain and make it relevant.
- Print copies of the Toolbox Talk Info sheet for yourself and each of the participants.
- Hold the talk in a location relevant to the topic being discussed.
- Explain why the Toolbox Talk is being held.
- Stay on topic and keep it simple.
- Encourage conversation and participation.
- Be sure to give real life examples whenever possible.
- Be open to questions.
- Read through the provided cases studies.
- After each study ask attendees what could have been done to prevent this situation.
- Conclude with a brief review of the main points or a summary based on the discussion.
- Record the details of the Toolbox Talk including the location, date and names of attendees.

**Note:** This Facilitator Guide is intended to provide a basic structure for conducting a Toolbox Talk. Customise it as needed to suit your specific audience and objectives. Always prioritise safety and ensure that participants have a clear understanding of the information presented.

A Practical Guide

# Quad Bike & Side-by-Side Vehicle (SSV) Operation

### Introduction

- Welcome everyone.
- Explain why the Toolbox Talk is being held.
- Mention the objective: to raise awareness and provide practical tips for quad bike / side-by-side vehicle use.

**Icebreaker** Consider starting with a brief question or scenario related to quad bike and SSV safety to engage participants.

For example, "Can you share a situation where proper safety measures made a difference while operating a quad bike or a side-by-side vehicle? It could be a personal experience or something you witnessed."

### Distribution of Resources

Hand out printed Toolbox Talk Information Sheets and any other resources.



### Key Points

#### Highlight Quad Bike Safety

- Discuss the hazards, including rollovers and loss of control.
- Explain the importance of operator protection devices, proper training and wearing helmets and protective gear.
- Stress the significance of balanced loads and safe speeds.
- Encourage operators to follow manufacturer guidelines and conduct regular maintenance checks.
- Stress the importance of not carrying passengers.

#### Discuss Side-by-Side Safety

- Highlight hazards, especially lateral head injuries due to sudden turns or collisions.
- Stress the importance of wearing helmets inside the vehicle.
- Discuss the significance of seat belts, especially in preventing ejections during incidents.
- Discuss the significance of other safety devices on your machines (netting, speed limiters, etc.)

### Interactive Discussion and Case Studies

Encourage participants to share their experiences, challenges, or questions related to quad bikes and SSVs.

Use the Case Studies on the next page to prompt conversation. Read the case studies out loud and ask participants for their thoughts.

### Q&A Session

Allow participants to ask questions and seek clarification on any topics covered.

### Conclusion

Summarise the main takeaways from the talk: keeping safe, keeping other safe, and emergency response.

Reiterate the importance of everyone's commitment to safety on the farm.

### Closing Remarks

Thank participants for their time and attention.

Remind them to apply the knowledge gained from this Toolbox Talk in their daily work.

### Feedback

Ask for feedback on the Toolbox Talk content and delivery to improve future sessions.



# Toolbox Talks Facilitator Guide

## CASE STUDIES



### Risk Management Tools

[DOWNLOAD ONLINE MATRIX](#)

Use this simple and effective tool to assess and manage the risk of your farming activities prior to commencing.

All team members can join in and contribute, developing different ways to manage risks on your farm. Doing a risk assessment helps determine hazards and develop appropriate control measures to lessen risks.

[farmsafe.org.au](http://farmsafe.org.au)

P. +61 2 6269 5622 | E. [info@farmsafe.org.au](mailto:info@farmsafe.org.au)

**Disclaimer:** This *Toolbox Talk* is intended as a *general* guide only and is designed to be used to increase risk awareness and safe work practices - it is not legal advice and does 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 worksites.

### CASE STUDY 1 Experienced Rider

**Scenario** Alex has been riding quad bikes on farms for years and is considered a very experienced rider. Alex has broken his leg in a fall from a horse and is currently in a cast that prevents him from straightening his leg and being able to place his full weight on that foot. Alex desperately wants to join in the mustering activities.

QUESTION	ANSWER
Is it okay for Alex to ride a quad bike to participate in mustering activities?	No, it would not be recommended for Alex to ride a quad bike until his leg allows him to use active riding techniques. Anything that restricts an operator's ability to use active riding techniques increases the risk of an injury.

### CASE STUDY 2 Side-by-Side Hacks

**Scenario** Happy Jack Farms has a side-by-side vehicle that has a mechanical speed limiter fitted. The side-by-side is limited to speeds of 10km/hr or less if the seatbelt isn't fastened. Lisa has figured out a way to remove the speed restriction while still not wearing the seatbelt.

QUESTION	ANSWERS MAY INCLUDE
What is the risk of operating this side-by-side vehicle without a seat belt?	<ul style="list-style-type: none"> <li>Being ejected from the vehicle.</li> <li>Being crushed by the vehicle if it rolls over.</li> </ul>

### CASE STUDY 3 Custom Quad Bike

**Scenario** Todd is about to go spraying in a paddock that contains several hills that he will need to traverse. Todd is planning on using a quad bike fitted with a rear-mounted spray tank.

**QUESTION 1** What things should Todd check before he uses the quad bike for this activity, and why should he check them?

ANSWERS MAY INCLUDE	REASONING
<b>Todd should check that...</b>	
- the spray tank is securely fitted to the quad bike.	An unsecured spray tank could shift during operation affecting the stability of the quad bike and distracting the operator.
- the spray tank is fitted in a way that doesn't prevent active riding techniques from being used.	Active riding techniques are just as important when carrying loads as they are when operating a quad bike without a load.
- the load capacity of the quad bike and the fill capacity of the spray tank.	It is important to check the limitations of the quad bike to ensure that the spray tank is filled to a level where the weight of the tank and its contents are less than the bike's maximum capacity.
- the limitations of the quad bike against the steepness of the terrain to be traversed.	Quad bike operating manuals should contain information on stability testing and maximum allowable angles for operation.
- the tyre condition and the tyre pressures using a tyre pressure gauge.	Poor tyre condition can result in loss of traction when traversing sloped terrain. Low tyre pressures can impact a bikes centre of gravity and increase the risk of rollover.
- the spray tank has internal baffles fitted.	Internal baffles can help prevent liquid loads from surging which can affect stability and increase the risk of rollover.

**QUESTION 2** What other things should Todd consider? Use this question to promote discussions around other things to do with quad bike safety. If necessary, use the following as prompts.

ANSWERS MAY INCLUDE	REASONING
How might the weight of the spray tank on the back of the quad bike change the stability of the quad bike when riding uphill?	Weight on the back of the bike may reduce the traction of the front wheels when going uphill.
How might the spray tank being fitted to the back of the bike prevent Todd from using active riding techniques when riding the quad bike downhill?	When going downhill on a quad bike active riding techniques require the rider to be able to slide backwards on the seat to place weight on the rear wheels when going down hills. The spray tank should be fitted in a way that allows the rider to move freely along the full length of the seat.
Will the weight of the spray tank increase or decrease the stopping distance of the quad bike when braking?	Anything that increases the mass of a vehicle will tend to increase the stopping distance required.
Is a quad bike the most appropriate vehicle for completing this task?	This is open to discussion. If there is a safer option or way of performing this task then that option should be chosen.
Does Todd's weight need to be considered when factoring in the load capacity of the quad bike?	Yes, it does. The operator's weight should be factored in when considering the overall weight limitations of a quad bike.

**Toolbox Talks**  
Facilitator Guide

A Practical Guide

**Quad Bike & Side-by-Side Vehicle (SSV) Operation**

**On-farm Toolbox Talk**  
Sign-off Sheet

Please list and/or attach all documents that have been provided including checklists, policies, safe operating procedures, etc.

**INSTRUCTIONS**

This sign-off template is available for you to use as part of your training packages. You will need to attach all evidence of all information given to the person that you have spoken with regarding this specific Toolbox Talk. This may include checklists, policies, safe operating procedures or notes about the conversations had, questions asked and other information provided.

Holding Toolbox Talks or safety meetings are not just about checking a box - they need to be tailored to your farming environment, meet the legislative requirements, and designed to support your employee, contractor, family member or visitor throughout the time that they spend living or working on your property. Inductions are only the first step in your WHS journey and it is important that you continue to create a safety culture on your farm by continuing to engage with your employees on any matters that may affect their health, safety and wellbeing.

The employee/contractor/visitor/family member that you have had this conversation with should acknowledge that they have received, discussed and understood all the relevant information that has been presented to them and attached and sign in the relevant space provided. A good practice is to ensure that the employee initials or signs each relevant piece of information that is attached and retains a copy of each for their own information. Records of WHS conversations should be kept alongside records of employment or in your work, health and safety management system and be updated as needed or as required by law.

**On-farm Toolbox Talk Participants**

**EMPLOYER – DETAILS**

I confirm that I have provided a relevant safety meeting to our farming business and that the employee has received, discussed and understood the listed and attached information.

Given Name(s)
Surname
Property Name
Date
Signature

**1. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER – DETAILS**

I confirm that I have received, discussed and understood all information that has been listed and attached to this document.

Given Name(s)
Surname
Property Name
Date
Signature

# Toolbox Talks Facilitator Guide

A Practical Guide  
**Quad Bike & Side-by-Side  
Vehicle (SSV) Operation**

## On-farm Toolbox Talk Sign-off Sheet

CONTINUED



**Australian Government**  
Department of Agriculture,  
Fisheries and Forestry

This project is supported by the Department of  
Agriculture, Fisheries and Forestry (DAFF), through  
funding from the Australian Government's National  
Farm Safety Education Fund.

### 2. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER – DETAILS

I confirm that I have received, discussed and understood all information that has been listed and attached to this document.

Given Name(s)

Surname

Property Name

Date

Signature

### 3. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER – DETAILS

I confirm that I have received, discussed and understood all information that has been listed and attached to this document.

Given Name(s)

Surname

Property Name

Date

Signature

### 4. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER – DETAILS

I confirm that I have received, discussed and understood all information that has been listed and attached to this document.

Given Name(s)

Surname

Property Name

Date

Signature

### 5. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER – DETAILS

I confirm that I have received, discussed and understood all information that has been listed and attached to this document.

Given Name(s)

Surname

Property Name

Date

Signature