#### 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.



#### **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

# **Chainsaw Operation**

Chainsaw safety is essential on farms, where chainsaws are used for a variety of tasks, such as cutting firewood, felling trees, and clearing brush. Chainsaws are powerful tools, but they can also be dangerous if not used properly.

#### The Hazards and Risks

#### **Reactive Forces**

Reactive forces can be very dangerous, as they can cause the operator to lose control of the chainsaw. This can lead to serious injuries, such as cuts, fractures, and amputations. The most common reactive forces are:

- Kickback: This is the most common and dangerous hazard associated with chainsaws. Kickback occurs when the tip of the chainsaw bar touches an object, causing the saw to be thrown backwards and upwards with great force.
- Pushback: Chainsaw pushback is a sudden and forceful movement of the chainsaw towards the operator. It is caused when the chain becomes pinched or trapped in the wood. This can happen when the chain hits a hard object, such as a nail or rock, or when the chain gets caught in a pinch cut.
- Pull-in: Pull-in occurs when the chain on the bottom of the bar is suddenly stopped when it is pinched or caught or encounters a foreign object. The reaction of the chain pulls the saw forward and may cause you to lose control of it.

#### **Cuts and Lacerations**

Chainsaws are sharp tools that can easily cause serious cuts and lacerations even when they are not running.

#### **Crush or Strike Injuries**

Chainsaw operators and bystanders are at risk of being injured by the things being cut or things that the cut objects fall on or strike. Some specific dangers include:

- · Being struck by falling branches or trees
- Being crushed by falling logs or branches
- Being cut by flying debris, such as wood chips or splinters
- Being hit by objects that are thrown by the chainsaw, such as rocks or nails
- Being injured by objects that are damaged by cut objects moving, such as power lines.

#### **Noise and Vibration**

Chainsaws can be very noisy and produce a lot of vibration. This can lead to hearing loss and hand-arm vibration syndrome (HAVS).

#### **Exhaust Emissions**

Fumes from petrol-powered chainsaws contain carbon monoxide and can pose a respiratory hazard if not used in well-ventilated areas. Long-term exposure to exhaust fumes may lead to health problems.

#### **Reducing the Risks**

The most effective way of reducing the risk of chainsaw-related injuries is to receive formal training.

#### **Reactive Forces**

- Keep the chain sharp and properly tensioned. A dull chain is more likely to jam.
- Use the correct chain and bar for the job.
   A chain and bar that are too large or too small for the chainsaw, or the item being cut, can increase the risk of kickback.
- Always start a cut with the chain rotating at full speed.
- · Avoid cutting above shoulder height.
- Use a proper cutting technique.
- Wear Personal Protective Equipment (PPE) like helmets and chaps.
- Adopt a boxer's stance (feet firmly on the ground, shoulder width apart and knees slightly bent).
- · Don't overreach.
- · Cut only one object at a time.

#### **Kickback**

- · Cut with the bottom of the bar, not the top.
- Ensure that the chainsaw is fitted with a functioning and reliable quick stop chain brake.
- Use a low kickback chain and a reduced kickback bar.
- Hold the chainsaw firmly with both hands and maintain a secure grip.
- Be aware of the location of the guide bar nose at all times.
- Never let the nose of the guide bar contact any object. Do not cut limbs with the nose of the guide bar.



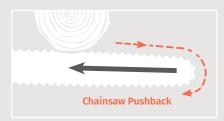
#### Kickback CONTINUED

- Be especially careful when cutting small, tough limbs, small size brush and saplings which may easily catch the chain.
- Use extreme caution when re-entering a previous cut.
- Do not attempt to plunge cut if you are not experienced with this cutting technique.
- Pay attention to the object being cut and any forces that could cause the cut to close and pinch the chain.
- Stand to the side of the cutting path of the chainsaw.

#### **Pushback**

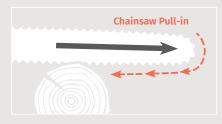
There are a number of things that can be done to reduce the risk of pushback, including:

- Be alert to forces or situations that may cause material to pinch the top of the chain.
- Do not twist the saw when withdrawing the bar from a plunge cut or underbuck cut because the chain can pinch.



#### Pull-in

- Always start a cut with the chain rotating at full speed and the bumper spike in contact with the wood.
- Pull-in may also be prevented by using wedges to open the kerf or cut.



#### **Links and Resources**

A Guide to Safety with Chainsaws -WorkSafeNZ worksafe.govt.nz

NT Worksafe - Chainsaw Safety worksafe.nt.gov.au

UNE Chainsaw Operation SOP une.edu.au

Ag Safety & Health ag-safety.extension.org

# A Practical Guide Chainsaw Operation



#### **Cuts and Lacerations**

- Wear appropriate personal protective equipment (PPE). This should include a hard hat, goggles, ear protection, gloves, and chainsaw chaps.
- Inspect the chainsaw before each use.
   Make sure the chain is sharp and tensioned properly, and that all safety devices are working correctly.
- Keep the chainsaw chain covered when not in use.
- · Turn off the chainsaw before carrying it.
- Carry the chainsaw with the bar and chain facing behind you.
- Start the chainsaw on the ground. Keep the chain brake engaged until you are ready to cut.
- Make sure that all guards and brakes are in place and functioning prior to use.
- Take breaks often. Chainsaw work can be tiring, so it is important to take breaks often to rest and avoid fatigue.

#### **Crush or Strike Injuries**

 Be aware of your surroundings. Before you start cutting, look around and identify any potential hazards, such as overhead branches, power lines, or items that may be hit by the object that you are cutting.

- Plan your escape route. In case a tree or branch falls or rolls unexpectedly, have a plan for how you will get out of the way quickly.
- Be extra careful when cutting branches that are under tension.
- Wear proper personal protective equipment (PPE). This should include a hard hat, goggles, ear protection, gloves, and chainsaw chaps.
- Setup an exclusion zone and barricades around areas where work is being performed to protect bystanders.

#### **Noise and Vibration Related Injuries**

- Wear proper ear protection. This should include earplugs or earmuffs with an appropriate rating.
- · Wear anti-vibration gloves.
- Use a low-noise chainsaw. Newer chainsaw models may be quieter than older models.
- Take breaks often. This can reduce the risk posed by both noise and vibration.

#### **Exhaust Emissions**

 Work in well-ventilated areas. Adequate ventilation helps disperse emissions, reducing the concentration of pollutants you might inhale.





#### A Practical Guide

# **Chainsaw Operation**

#### Introduction

- · Welcome and introduction to the session.
- Briefly outline the importance of working safely with chainsaws and the potential risks involved.

**Icebreaker** Consider starting with a brief question or scenario related to working with chainsaws to engage participants.

For example, "Have you ever had a close call when working with a chainsaw, or do you know someone who has?"

#### **Distribution of Resources**

Handout printed Toolbox Talk Information Sheets and any other resources related to chainsaw safety.

#### **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.

#### **Key Points**

#### Types of Hazards and Risks

- Discuss the various hazards and risks associated with working with chainsaws.
- Explain the potential injuries and consequences.

#### **Safe Practices**

- Present safe practices for working with and around chainsaws.
- If overhead powerlines are present on your farm discuss these locations and how to avoid overhead powerlines when working with chainsaws.

#### **Demonstration and Practical Tips**

- Conduct a live demonstration of safe chainsaw usage.
- Provide practical tips and techniques for any tasks performed with and around chainsaws.

# Interactive Discussion and Case Studies

Encourage participants to share their experiences, challenges, or questions related to chainsaws.

Use visual aids or diagrams if available to illustrate key points.

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.

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.

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.



# TUDIFS



#### **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

P. +61 2 6269 5622 | E. 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.

### The Importance of Establishing Exclusion Zones

Scenario John was assigned to remove a large tree near an area where other workers were performing tasks. John started operating his chainsaw without establishing an exclusion zone around the work area. As John was cutting a large branch, it fell, hitting a branch on the tree beside it. Both branches fell, narrowly missing the nearby workers.

#### QUESTION ANSWERS MAY INCLUDE How could the · Creating an exclusion zone around the work area. incident have been • Performing a risk assessment and considering how the avoided? branches being cut could potentially cause an incident. • Training for all workers involved on the hazards of working around chainsaws. Communicating with other workers about the work that was being conducted and the potential dangers.

#### CASE STUDY 2

#### **Kickback Alert**

**Scenario** Sarah is a new worker on the farm. She has received formal training on chainsaw handling and safety, but it was a few months ago. You have been asked to give Sarah a refresher on chainsaw safety.

#### OUESTION

#### What tips would you give to Sarah on avoiding kickback when using the chainsaw?

#### **ANSWERS MAY INCLUDE**

- Keep the chain sharp and properly tensioned. A dull chain is more likely to jam.
- Use the correct chain and bar for the job. A chain and bar that are too large or too small for the chainsaw, or the item being cut, can increase the risk of kickback.
- Always start a cut with the chain rotating at full speed.
- · Avoid cutting above shoulder height.
- · Use a proper cutting technique.
- Wear Personal Protective Equipment (PPE) like helmets and chaps.
- · Adopt a boxer's stance (feet firmly on the ground, shoulder width apart and knees slightly bent).
- · Don't overreach.
- · Cut only one object at a time.
- Cut with the bottom of the bar, not the top.
- Ensure that the chainsaw is fitted with a functioning and reliable quick stop chain brake.
- · Use a low kickback chain and reduced kickback bars.
- · Hold the chainsaw firmly with both hands and maintain a secure grip.
- Be aware of the location of the guide bar nose at all times.
- · Never let the nose of the guide bar contact any object. Do not cut limbs with the nose of the guide bar.
- Be especially careful when cutting small, tough limbs, small size brush and saplings which may easily catch the chain.
- · Use extreme caution when re-entering a previous cut.
- · Do not attempt to plunge cut if you are not experienced with this cutting technique.
- Be alert for shifting of the object being cut or tension forces that may cause the cut to close and pinch the chain.
- · Stand to the side of the cutting path of the chainsaw.

#### What other hazards would you remind Sarah to be aware of?

- · Reactive Forces
  - Pushback
  - Pull-in
- · Cuts and lacerations
- · Crush or Strike Injuries
- · Noise and Vibration
- · Exhaust Emissions



# **Toolbox Talks**Facilitator Guide

#### **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.

A Practical Guide

# **Chainsaw Operation**

# On-farm Toolbox Talk Sign-off Sheet

Please list and/or attach all documents that have been provided including checklists,

n Toolbox Talk Participants
YER - DETAILS
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 stached information.
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Name
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LOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER - DETAILS
confirm that I have received, discussed and understood all information that has been sted and attached to this document.
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# **Toolbox Talks**Facilitator Guide

A Practical Guide
Chainsaw Operation

### **On-farm Toolbox Talk**

Sign-off Sheet

CONTINUED



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.
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