

# TOOLBOX TALK: CHAIN SHOT

Toolbox talks are a great way to share important information that can keep your workers and business safe. Take a few minutes to read through this document with your staff and contractors.

A chain shot event occurs when broken piece/s of chain are ejected from the saw in the mechanical harvester or processing machine, usually due to incorrect use or lack of maintenance.

Chain shot normally happens in the drive end of the cutting system but can also come from the tip of the bar.

Saw chain pieces usually travel in the cutting plane of the guide bar but can deviate to either side (see illustrations).

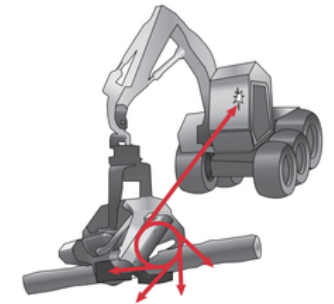
There is risk of serious injury or death to the machine operator, ground personnel and bystanders from chain shot.

Machines and bystanders are at greater risk when they are located within the '**chain shot zone**'.

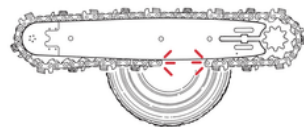
## Ways to minimise chain shot risk

- Never use the saw when the saw bar is in line with the cab, or near others.
- As per the machines manual, conduct regular checks and maintenance on:
  - The chain
  - Chain guard
  - Chain catcher
  - Maintain chain tension
  - Chain speed and cutting pressures.
- Ensure correct margard (polycarbonate) is installed on the machine windscreen.
- Always keep cabs and doors closed when operating.
- Ensure safe machine manufacturer settings are not tampered with.
- Ensure no one is located within the chain shot zone.
- Other machines and bystanders to remain a minimum of 100m away.
- Always cut as close to the ground as possible to reduce the distance that any potential ejected pieces could travel.
- Avoid getting chain caught in understorey shrub.
- Refer to the [NIFPI Report](#) for further information.

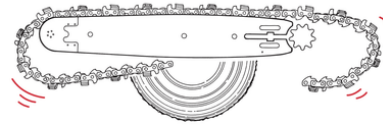
## Chain shot zone



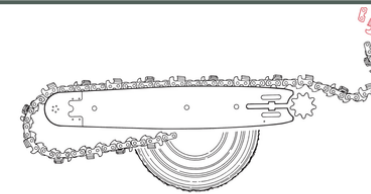
## How does chain shot happen?



1. The saw chain breaks.



2. The 'free' end of the chain releases.



3. The chain or pieces of can be ejected.

Always report chain shot events including incidents and near misses

Source: Forest Centre, 2023  
NIFPI, 2022