

Amenity Tree Felling Managing risks



Workers must never attempt to tackle any type of tree felling task they have not been trained in.

Each year, Australian workers are seriously injured or killed during tree felling and related activities. Australian data indicates about 65% of fatalities occurred during tree felling, 20% during trimming/lopping and 7% during cutting/clearing of felled material.

Professional arborists and loggers are most likely to be trained and competent in their tasks, but some allied occupations undertake tree felling as an 'occasional' task and may have limited skills and experience. These could include, among others, landscapers, gardeners, farmers and emergency service volunteers.

Persons Conducting a Business or Undertaking (PCBUs), regardless of the size of the business, must ensure people are not exposed to health and safety risks resulting from the work activities being performed. This includes determining and implementing safe systems of work to eliminate or minimise risk.

Safe systems of work are based on a risk assessment process, involving those performing the work. Documenting the method in which the task will be performed will become your safe work procedures (SWPs).

SWPs are usually written to cover generally encountered or known risks. In addition to these, an on-site assessment must be undertaken to identify and control site-specific risks on every new tree felling job.

The PCBU should develop a relevant method for this and ensure their workers are using it.

Common risk factors when manual felling with a chainsaw

- Hazardous trees (leaning, stressed, rotten cores, unpredictable).
- Difficult ground conditions and slope.
- Escape routes not clearly identified.
- Chainsaw recoil or kickback.
- Objects falling from the tree you are working on and other trees in the vicinity (including dead spars).
- Nearby structures and powerlines.
- Standing vegetation in the intended fall direction.
- Being struck by the butt of tree (e.g. barber chair – a particular risk in Australian hardwoods).
- Inclement weather conditions (e.g. high winds).
- Foreign object in the tree.

Common risk factors when felling is assisted by mobile plant

- Inadequate falling objects protective structure (FOPS) fitted to the machine.
- Inadequate weight and reach capacity.
- Incorrect calculation of stability and capacity.
- Utility services (e.g. overhead powerlines or underground gas pipes).
- Movement/shaking of tree by machine when feller is near the tree.
- Unidentified escape route for feller and machine operator.

Sectional felling

This is the process of felling a tree by working at height to gradually cut and lower the tree in sections to the ground. Only professional arborists should undertake sectional felling. Additional hazards in this task include:

- Damage/exposure to underground services with falling sections.
- Instability/tipping of assisting mobile plant.
- Bouncing of dropped sections, requiring a larger exclusion zone, particularly on slopes.
- Feller being struck by a section he/she has just cut.

Safety solutions

- Ensure sufficient resources are available (equipment, skilled arborists and workers) on site to enable appropriate decision making of work to be carried out.

- Use only equipment designed and rated for its intended purpose (e.g. ropes and cables).
- Ensure those undertaking the work are adequately trained and that safe work practices are being adhered to.
- Never ask for the assistance of untrained people (e.g. client or member of public)
- Ensure all environmental factors are appropriately assessed and controlled.
- Set up appropriate exclusion zones where residential premises, persons or public access are in the vicinity.
- Use only equipment that is designed and suitable to perform the task (e.g. correct sized chainsaw and wedges).
- Only undertake jobs within the capability of you or your team.

It is highly recommended to use professional arborists for felling trees near powerlines, roads or buildings, large shelterbelt trees, trees with a heavy lean or on steep or unstable slopes, and for any machine assisted and/or sectional felling.

Further information

Safe Work Australia's [Guide to managing risks of tree trimming and removal work](#)

Tips and advice

For tips and advice on work health and safety, SafeWork SA offers a free workplace advisory service.

An experienced WHS advisor can visit your workplace to help you to identify hazards and risks, and put in place practical safety systems that will suit your specific circumstances.

Our advisors have no inspector powers at all under the WHS Act so you can feel comfortable inviting them in to help.

Request a visit at safework.sa.gov.au/freeadvice or call 1300 365 255.