# Sawmill Safety Meeting Kit




## WHAT□S AT STAKE

Working in a sawmill is one of the most dangerous occupations in the United States. Massive weights and falling, rolling, or sliding logs can be very dangerous. Sawmill equipment also can be hazardous, particularly when workers use machines improperly or without proper safeguards.

## WHAT□S THE DANGER

**HAZARDS OF SAWMILL OPERATIONS**

**Machine or transmission start-up (improper lockout).** Injuries experienced by accidental machine start-up can include lacerations, crushing and amputations. In some circumstances these injuries can cause permanent disability or death.

**Unguarded equipment.** Injuries to workers can include lacerations, amputations, crush by entanglement and loss of consciousness. Serious injuries can lead to permanent disability or death. Hazards due to unguarded equipment include worker exposure to pinch points, moving (rotating) equipment and in-running nip hazards. Equipment that has exposed moving parts such as cutting equipment, conveyors, augers, equipment using power take-off (PTO), and exposed drive-motor assemblies used to power compressors and/or ventilation fans may endanger a worker.

**Material handling hazards struck by objects, caught between, or crushed by objects.** Injuries associated with material handling can include workers being struck by objects, caught between objects and/or crushed by mechanical compression. Manual material handling may also lead to MSDs.

**OTHER HAZARDS**

**Musculoskeletal disorders (MSDs).** Workplace pains and strains can be serious and disabling for workers, causing pain and suffering ranging from discomfort to severe disability. MSD is not a medical diagnosis; it is an umbrella term for a group of injuries. Some of these injuries include back pain, muscle strain, tendonitis, carpal tunnel syndrome (CTS), rotator cuff syndrome, tennis elbow and shoulder pain.

**Slips, trips, and falls.** Slips, trips, and falls hazards include hazards that result in workers falling onto the same surface or falling from a height.

**Noise.** Injuries to workers can include varying degrees of noise-induced hearing loss.

**Transportation equipment and vehicle traffic.** Injuries can occur when workers are struck by or come into contact with motorized equipment or vehicles in a workplace.

# HOW TO PROTECT YOURSELF

**KEY SAWMILL SAFETY MEASURES FOR WORKERS**

**Use Warning Signals!** Sawmills should have a large number of warning signals in place to help alert employees to potential danger. Securing those warning signals is knowing when to use them. Instruct your employees to sound a warning alarm even if something only appears to be dangerous.

**Watch for Blade Guards.** To prevent unwanted death by laceration, most mills make use of blade guards that serve as a barrier between mill personal and the moving blades. Inspect every machine that involves a blade regularly.  If it looks like an accident is possible, fix those blade guards or install new ones.

**Lumber piles can fall.** Sawmills are usually careful to instruct their employees on proper lumber stacking techniques. Checking the stacks regularly can help lessen the risk of accidents occurring, but making sure that the logs are stacked correctly from the beginning is priority number one.

**Check Machine Hydraulics**

- One of the best ways to practice sawmill safety is to complete any repairs in a timely manner.
- Sawmills require heavy-duty machinery, specialized equipment, and extensive electrical systems for daily operations. With the right safety measures in place sawmill workers can mitigate these risks and address key safety areas to keep businesses running smoothly.

**General Housekeeping**

- The first step for sawmill safety is creating a solid housekeeping program to ensure that sawdust, wood chips and bark that have built up during the day are safely removed from the building at the end of each workday. A strong housekeeping plan will be written down and be a part of regular training so that every worker knows their responsibilities and will be held accountable for their role in the program.
- The sawmill basic cleanup procedure should be followed daily along with a more comprehensive cleanup performed at the end of every week.
- The housekeeping program should include removing dust buildup in corners, along walls and under machinery as well. Approved and listed vacuum systems suitable for combustible dust applications are ideal for periodically cleaning overhead dust buildup. Ensure all ignition sources in the facility are off, doors are open for ventilation purposes and reduce air pressure to less than 15 pounds per square inch (psi).

**Deliver Machine and Worker Safety**

- Wood processing plants employ various kinds of cutting equipment, for example saws, routers, chippers, planers, sanders, slicers, peelers and more.

All cutting and debarking equipment, such as circular saws and rotary debarkers, should be fitted with safety guards or interlocks capable of preventing access to moving parts. Workstations should be aligned to minimise human danger from fragments which could arise from breakage, while saws and debarking equipment should be

regularly inspected and maintained to prevent equipment failure.

- § Workers must be trained on the safe use of cutting and debarking equipment, such as the use of push-sticks and other means to move timber past a blade while keeping all parts of the body away from the blade. All personnel operating cutting equipment should use protective eyewear and other Personal Protective Equipment (PPE) as necessary. Saws should be equipped with screens or other devices to protect workers from log kick-back.
- § Sawmills typically transport wood using conveyor systems. Conveyors under high tension may break, resulting in injury. Clothing or limbs can also become entangled in conveyors.
- § Plant design should emphasise simple conveyor routes that are clearly demarcated, with the use of skirt boards to prevent access as necessary. Moving gears, chains and rollers should be fully enclosed, and hard hats should be worn in areas where elevated conveyors are in use.
- § Conveyor belt arrestors should be installed to stop the conveyor in the event of a belt failure. Belts should be inspected daily by trained personnel to ensure that they are in good working order.

## FINAL WORD

Wood millers and manufacturers use powerful cutting machines to cut, route, and shape wood materials to create different products. The most frequent injuries to wood industry workers include trauma to hands and fingers from blades and machinery, lower back injuries due to lifting heavy objects, and strains and sprains due to frequent, repeated movements.