

# Industry Alert—Injury

## *Sawmill worker's foot caught in moving drag chain*

### **What happened?**

A labourer was using a shovel to remove a pile of wood chips and sawdust from the floor of a sawmill when his foot became caught in the drag chain, a conveyor that moves wood waste along the mill floor. The chain dragged the worker toward a pulley and his foot was drawn upward around the pulley. Investigators believe the steel toe of the worker's boot derailed the chain from the pulley, causing the chain to stop moving. The worker suffered serious ankle injuries.

### **Why did it happen?**

A four and a half-foot high steel rail was mounted on the floor beside the drag chain and an overhead structure, but there was no guarding device in place to prevent physical access to the moving chain and the steel rail did not provide sufficient protection.

### **How can it be prevented?**

According to Ministry of Labour statistics, one in every four fatal workplace incidents in Ontario in 1999 and 2000 and one in every eight critical injuries, including limb amputations, were related to guarding and lockout violations. Entanglement or drawing-in as a result of physical contact with rotating parts is one of the leading causes of injuries. Transverse motion such as that of a drag chain occurs in a straight, continuous line and can catch the worker in a nip or pinch point.

Section 24 of the Occupational Health and Safety Act's Regulation for Industrial Establishments requires the guarding of any machine part, function or process that may pose a hazard to which a worker has physical access. Whether a worker can deliberately or accidentally enter the danger zone and come into contact with the machine must be considered. Compliance with the law requires that the hazard be eliminated.

Power transmission equipment such as chains, V-belts, couplings and shafts all require guarding. To be effective, a guard must prevent anyone from reaching over, around, through, under or behind it. The guard has to extend around pinch points on parts such as pulleys and drive belts and it should prevent loose hair, clothing, personal articles and equipment from coming into contact with the danger point.

**OFSWA** Ontario Forestry Safe  
Workplace Association

**ASTIFO** Association pour la sécurité au travail  
dans l'industrie forestière de l'Ontario

Although the description of circumstances arises from an actual situation, this Industry Alert does not reflect the final analysis of the situation, nor is it meant to assign blame on the part of any person or member firm. For further information, contact OFSWA at (705) 474-7233.

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