

Leg Cut While Wearing Kevlar Safety Inserts

Attention: Chain saw operators in Washington State

Incident:

Recently a timber faller was cutting a vine maple when his saw kicked back and cut his leg.

On the day of this incident, he was wearing Kevlar safety inserts, also known as safety pads, inside his jeans as he had for many years. The inserts were attached to his jeans only at the waistband, so when the saw chain hit, it rolled the unsecured inserts aside and cut through his jeans and into his leg. The picture to the upper right shows his injury.

The timber faller had relied on the use of these inserts for years and when he needed the protection, they failed. He asked that his story be shared to prevent others from being injured.



This worker wants you to know that Kevlar safety inserts worn inside his jeans did not protect his leg from serious injury.

Photo courtesy of an injured worker.

How can I prevent this from happening in my workplace?

- Wear chaps that are rated to ASTM standards; ASTM F 1897-2008.
- Wear and maintain all personal protective gear to the manufacturer's requirements.

Rules and Recommendations

Many in the industry use safety inserts like these every day, but are they adequate? Better to prevent this type of serious injury from happening to you or someone you know by:

- Using only ASTM-rated and tested safety chaps while operating a chain saw and following the manufacturer's specifications.
- Ensuring that Kevlar safety inserts are secured so they can't move around inside pants or chaps. For example, use them inside pants that are designed and manufactured to accommodate them.

Follow the workplace safety requirements that apply to leg protection:

- WAC 296-54-51160 (1) The employer must provide, at no cost to the employee, and ensure that each employee who operates a chain saw wears leg protection constructed with cut-resistant material, such as ballistic nylon. The leg protection must cover the full length of the thigh to the top of the boot on each leg to protect against contact with a moving chain saw.



Contact with moving chain saw teeth can cause poorly secured Kevlar safety inserts like these to roll sideways or up inside of jeans, leaving legs vulnerable to deep cuts.

Photo courtesy of L&I.

OVER



- WAC 296-54-511 (3) Design. All personal protective equipment must be of safe design and construction for the work to be performed. All safety belts and attachments must meet the requirements of section 3 of ANSI A10.14-1975.
- WAC 296-54-515 (3) The accident prevention program must cover at least the following elements: (f) The use and care of required personal protective equipment.

Other resources you can access

Find an **electronic** copy of this [Hazard Alert](#).

Also get more information on:

[Logging](#)

[Personal Protective Equipment \(PPE\)](#)

Rules:

Rules that address logging safety can be found in [WAC 296-54](#).

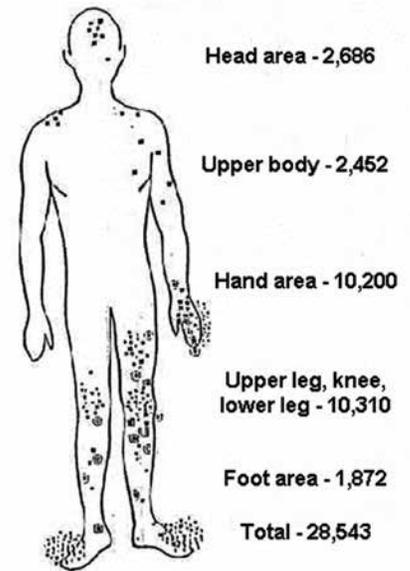
For other related rules, visit the [Safety Rules](#) Web page or contact your local L&I office.

How can I get help from L&I?

The Department of Labor & Industries provides consultations, training, and technical assistance at no cost to employers. Call today to schedule a free confidential consultation or go to [Request Consultation](#) for more information.

You may also call 1-800-423-7233 or find your [local L&I office](#) and ask for the Consultation Manager.

Accident Location and Frequency Related to Chain Saw Use in 1999



In more recent years, approximately 36,000 people nationally are treated in hospital emergency departments for injuries caused by chain saws. Don't let a chain saw injury happen to you. Always use the right safety gear.

Photo courtesy of CDC/NIOSH.



Photo shows approved chaps with ASTM tag.

Photo courtesy of Stihl Northwest.

*This alert was developed by L&I's Division of Occupational Safety and Health (DOSHS) to alert employers, labor groups, and employees to potential hazards associated with work activities. **This is not a rule and creates no new legal obligations.** The information provided includes suggested guidance on how to avoid workplace hazards and describes relevant mandatory safety and health rules. DOSHS recommends you also check the related rules for additional requirements.*