

What is Common Ground?

Common Ground shares practical ideas that address the top safety and health issues facing electricians.

Common Ground is based on realworld practices used by Washington electrical contractors.

Reduce on-the-job injuries: try at least one new idea from each of the 5 editions:

✓ Worksite Hazard Analysis
 Ladder Safety
 Working De-Energized
 Housekeeping
 Lockout/Tagout

If you have a safety idea that you would like to share, or to make comments about this publication, we would like to hear from you.

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What Washington State electrical contractors are saying about...

Work Site Hazard Analysis

Why Invest in Work Site Hazard Analysis?

Managers who conduct safety walkthroughs agree that the 15 to 30 minutes spent on work site hazard analysis is a good investment toward injury prevention.



"If you get an electrician doing a safety walkthrough, the next day they are more likely to have safety on their radar screen."

-- Manager, Electrical Contracting Firm

Hazard analysis is a systematic approach to identify, evaluate, and control hazards at a work site.

Washington contractors are proactively analyzing their work site for safety and getting results:

Company 1: Increase employee safety awareness on the job site

At one firm, two electricians volunteer to note unsafe activities over a three-month period. Before the quarterly safety meeting, the electricians sit down with the safety manager and think of solutions to the hazards. The electricians themselves present the hazards and solutions to the rest of the crew.

"When you involve the employee in the process they are more likely to take ownership of the program."

Company's overall safety culture

Safety walkthroughs were conducted in the sheet metal shop of an electrical/HVAC business every day. A young employee who had been trained in noise hazards was lax at wearing his earplugs, and was repeatedly told to wear them during the walkthroughs. When he noticed his co-workers were not reprimanded because they wore their earplugs, he eventually accepted the hearing protection as part of the job culture.

"Humor is a big plus. It is accepted when presented with humor. There is occasionally a red face, but staff is more aware of what is expected, and eventually they start to perform differently."

Company 3: Bring variety and realism to your safety meetings

Twice a month the foreman at a small electrical company picks an electrician to walk through a job and note hazards, such as improper ladder and tool use. Hazards that concern other trades, such as sheetrock being loaded through a second story window as pipe fitters work directly below, are also noted. The walkthroughs give interesting and realistic subject matter for discussion at safety meetings.

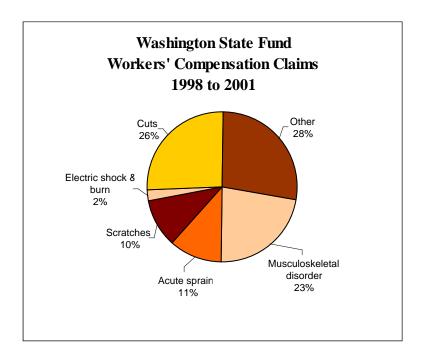
"Keep it fun. Some employees may think the walkthrough is a test. If so, try sending the electricians out by themselves so there is less pressure to find hazards. Don't make it a chore, or something they dread doing."



A Step-by-Step Approach:

- $\sqrt{}$ Identify hazards that can cause an injury.
- $\sqrt{}$ Evaluate the seriousness.
- $\sqrt{}$ Decide whether action is needed.
- $\sqrt{}$ Assign persons responsible for the action.
- $\sqrt{}$ Implement the solution.
- $\sqrt{\text{Re-evaluate over time.}}$

What injuries are most important to prevent?



Between 1998 and 2001, there were a total of 11,410 workers' compensation (WC) claims filed by electricians. Cuts and musculoskeletal disorders account for nearly 50% of all injuries.

These WC claims cost a total of approximately \$54 million.

Musculoskeletal disorders accounted for 33% of the costs.

It is important to prevent all types of injuries. Because of their frequency and costs, musculoskeletal hazards should be identified and eliminated when possible. Musculoskeletal hazards include:

- Awkward body posture: arms above the head, bent back or neck, squatting.
- Highly repetitive motion.
- Heavy, frequent or awkward lifting.
- High hand force.
- Repetitive pushing and pulling.

One safety manager mentioned the importance of reducing body strain when pulling wire:

"There are many ways to pull wire, and the way you set it up can vary depending on the job site. Experience helps the electrician understand the most efficient way to do it."

Observing tasks like wire pulling can be a part of work site hazard analysis. Use the step-by-step approach outlined on Page 2 to reduce injuries from wire pulling.

Copies of all *Common Ground* editions as well as the publication, *Electrical Contractors Industry Focus Group Report* can be found on SHARP's web site: https://lni.wa.gov/safety-health/safety-research/completed-projects/healthy-workplaces-electrical-millwork-food#overview.

All quotes, opinions and company practices were solicited through focus groups and interviews conducted by L&I's Safety & Health Assessment & Research for Prevention (SHARP) Program. This publication seeks to promote practical safety strategies; it does not attempt to interpret whether the opinions expressed meet the Washington State Administrative Code.



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