



Powering down is always the first step to safety

In staging last month's "What's wrong with this photo?" contest, WorkSafeBC worked closely with BC Hydro to create an electrical safety scenario as suspenseful as a movie set. The photo showed one worker already down, while another rushed to his rescue – seemingly oblivious to the dangers awaiting him. Luckily, many readers picked up on the deadly risks of rescues in energized environments. And given the frequency of this oversight, it's reassuring to find contestants on the same page.

It's also good to know no one's safety need ever be compromised, even during photo shoots. In this case, BC Hydro came to the rescue, ensuring the photo was taken at an affiliated educational site (Surrey's Electrical Industry Training Institute) – with no live wires in sight. Nonetheless, WorkSafeBC occupational safety officers Sat Combow and Andrew Lim were quick to weigh in on the grave consequences of just such an emergency in the real world:


- The worker is wearing running shoes.
- The worker has an iPod in his ears.
- The worker's safety vest is not being worn properly.
- The worker's hard hat is just a shell; it has no inner suspension system.
- The rescue worker is blindly running into a potentially energized area.
- The photo shows the line is energized. (It must be de-energized and locked out/controlled before anyone approaches the worker.) This may not be obvious, but the "rescuer" should have assumed the line was live before approaching the injured worker.
- If the line is a primary (high-voltage) cable, it presents a step potential hazard.
- If the line is a secondary cable, it presents a touch potential hazard.
- If this is a primary (high-voltage) line, and workers were working on the line when it fell, permits, grounding, bonding,



clearances, etc. should have been in place. The line shouldn't have been live unless de-energizing was impracticable.

- The worker approaching the injured worker should have the training to understand the hazards associated with electricity, e.g., step potential, approaching fallen electrical lines, etc.
- If the "rescue worker" is the first aid attendant, then he has no first aid or personal protective equipment, and he didn't ensure the absence of danger before approaching the worker.
- Assuming the "rescue worker" is not a first aid attendant, is there a procedure for calling emergency services and first aid until the line is de-energized?
- What caused the line to fall? Is the hazard still around, i.e., are there multiple casualties?
- Tire tracks surround this worker. Is the equipment still around and driving? Does it present a hazard?
- If trained, the rescue worker should have ensured no one approached the injured worker until the line was de-energized. (Otherwise, there may be multiple casualties.) And a safe area must be demarcated [at least 10 metres (33 feet) for high voltage; if it's very high voltage, it would be farther].
- Was there a hazard assessment to determine if this event was preventable?, i.e., the line could have been in a precarious position to begin with (a rotten pole) and then fallen down. Or a mobile equipment operator may have been travelling or working too close to electrical lines and pulled them off. He should be within the limits of approach, especially if it is high voltage.
- Are other workers in the vicinity trained in electrical hazards?

Now it's your turn. See our centre-spread, pullout poster for a closer look at safety issues facing arborists.



Tony has won
a car safety kit for
his letter!



Rescue workers need to secure their own safety first

Editor, *WorkSafe Magazine* (Re: November/December issue, “What’s wrong with this photo?”)

After looking at some back issues of your magazine, I kind of figured out how this works. Some responses people provided were way too speculative, especially when you only have a snapshot of what’s happening at that very second.

Here’s my assessment, based on what I can see:

- The guy was shovelling gravel into a wheelbarrow when a live electrical wire fell on top of him, or close enough that the wet ground transferred the energy to him.
- The injured worker is not wearing his vest properly, although it could not have had any bearing on the incident.
- He is wearing an MP3 player and earbuds. He would not have heard warnings of a wire breaking/falling. He should not wear these things at work, anyways.
- His helmet is missing its liner, whether it’s attributed or not, it’s very bad.
- He is not wearing proper safety footwear.
- The shovel is too small for the worker. I can see lots of back (ergonomic) issues here, but do not attribute them to this incident.
- The rescuer did not wait for the electricity to be isolated. Now he’s soon to be victim number two.
- The rescuer is running towards wet ground and electricity. Not very smart. Make it safe for yourself, then help.

Extras:

Okay, now for the speculative part.

- Although the worker is just digging gravel, there are tracks suggesting a piece of machinery could have done this job instead of a wheelbarrow. Actually, it looks as if the piece of machinery drove over the worker, who could not hear it approach and it broke the overhead electrical cable. Hmmm....?
- What are the worksite rules for safety glasses and masks? I could speculate here that glasses and a dust mask are needed,

but probably not while you’re digging gravel.

- What caused the electrical line to break and fall on the worker? Low flying aircraft? An earthquake? Poor maintenance procedures? Did the wire have a grudge against the worker?
- Did the supervisor call 911 and alert someone, or is he just carrying the phone because he was texting or playing a game?
- Why was the worker using a metal wheelbarrow around fallen electrical cables?
- The rescuer is not wearing safety glasses, a dust mask, or the proper gloves, even though he should wait for the power to be isolated.
- Okay, the machinery didn’t run him over because there are footprints in the tire tracks. But you have to admit, I was onto something there.

The extras I included are for fun. When I get bored and/or annoyed, I get dangerous with a keyboard.

I quite enjoy your publication and the information and articles it provides. Keep up the great work. You gave me a 15-minute break. I don’t want to win a watch or anything. I’m just happy to have been distracted.

CPO2 A.W. (Tony) Specht

Safety programs officer

Formation safety and environment unit chief

CFB Esquimalt – National Defence

Victoria, B.C.



Avoid rushing to help in this emergency

Editor, *WorkSafe Magazine* (Re: November/December issue, “What’s wrong with this photo?”)

- Non-insulated, non-protective footwear
- Safety vest used as a belt
- Electrical line down: the area should have been cordoned off to ensure no access
- What? No gloves? Just try to move that line
- Although it’s an emergency, don’t run!
- Don’t know what this is, but it looks like a tripping hazard
- This ground is saturated with water – a great conductor
- Watch it! This wheelbarrow’s live

- No hard-hat liner. No wonder it fell off his head
- Not sure if this guy was electrocuted or got ran over – look at the tracks
- A really common violation: people wearing ear buds, listening to music
- The trowel is a tripping hazard
- It seems heroic to run to the rescue. Bad decision: now there's two people down
- A lot of water here; there should be some drainage
- Hard to believe his phone fell out of his pocket. He must have been talking on it while on the job
- It looks quite sunny out. Maybe this guy should have had sunglasses on to prevent the glare
- Short shaft shovel – great for straining your back

Ian Warrender
 Electrical trades instructor
 Camosun College
 Victoria, B.C.



Young women in trades should aim to transcend stereotypes

Editor, *WorkSafe Magazine* (Re: November/December issue, “Young women drawn to Heavy Metal”)

I am writing with regard to your article about female secondary students joining a program to learn how to run heavy machinery, in the possible interests of pursuing this as a career. As a woman who has worked in the forest industry for the past 20 years, I see the Heavy Metal program as a great opportunity. And it's great to know that WorkSafeBC is assisting in prevention efforts for young women entering trades such as this one.

However, in the discussion concerning what women need to equip themselves for this kind of work, I found the following quote from WorkSafeBC occupational safety officer Lindy Monahan offensive: “They need to...have a thick skin – and a good sense of humour – when they're working in a male-dominated workplace.” I've asked both men and women around my workplace, and they've agreed that this statement implies a different set of standards for code of conduct for workers entering the trades.

I am fortunate to have worked with incredible men and women in the forest industry. But developing a thick skin and a good sense of humour was certainly not required in order to get or maintain employment, or advance to my current position. The implication that this is a requirement for working in a male-dominated workplace not only further promotes a stereotypical view of those workplaces, but undermines the incredible men who work there.

Kelly Kitsch
 Forest technologist
 Maple Ridge, B.C.

Ed. Note: As an organization that supports gender equality and discourages discrimination, WorkSafeBC – and by extension, WorkSafe Magazine – makes every effort to promote positive messages about women working in the trades. In that vein, it's encouraging to see this topic spark interest among the magazine's readers. According to WorkSafeBC occupational safety officer Lindy Monahan, who formerly spent many years working as a tradeswoman, it's essential to enter the trades with a healthy degree of respect for your male co-workers, along with some coping skills for the demands of the job. “I've also had a wealth of positive role models and supportive employers,” she says. “But I still needed to draw upon my resilience and good humour along the way, especially given the wide range of people and experiences I encountered on the job.

“My advice to these young women is to stay fit and strong if you want to work in the trades, because that will keep you safe and healthy. The mental strength is just about being focused and able to roll with the punches; it's a line of work that can be tough on both sexes.”



View more responses to “What's wrong with this photo?”
 on our website, WorkSafeMagazine.com.