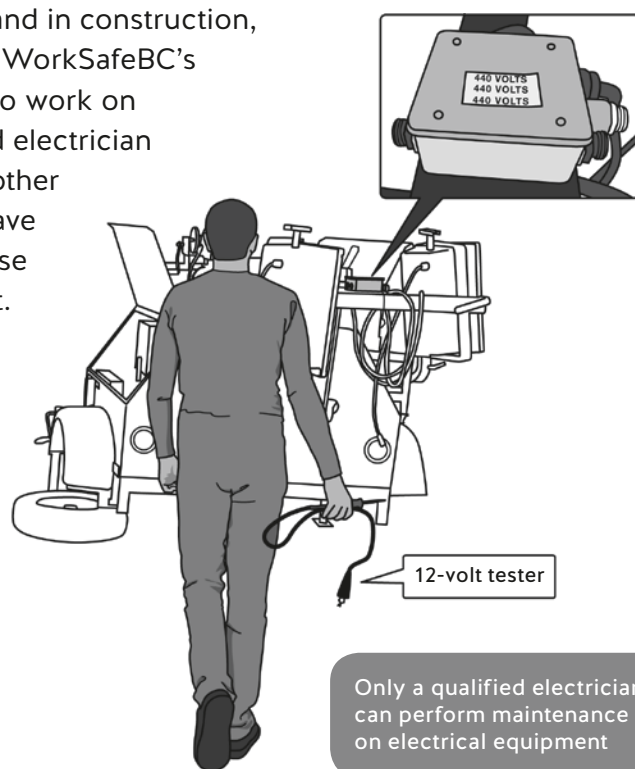


Worker electrocuted while fixing light tower

A young worker apprenticing as a heavy-duty equipment technician was troubleshooting a portable light tower (a light system running off a diesel-powered generator). The lights on the tower were not working. The apprentice tried various tactics, to no avail. With the tower running on its internal generator, he inserted a 12 V automotive circuit tester into a lamp socket on the side of a junction box marked 440 V. This created an electrical pathway across his chest. He was fatally electrocuted.

Light towers, commonly used in the oil and gas industry and in construction, are complex, potentially dangerous pieces of equipment. WorkSafeBC's investigation found that the apprentice was not qualified to work on electrical systems such as the light tower. Only a qualified electrician should have performed maintenance or troubleshooting other than changing bulbs on the tower. An electrician would have recognized that the circuit tester, which was labelled for use below 12 V, was the wrong tool for testing a 440 V socket.



Safe work practices

Employers

- Ensure that workers carry out work on equipment in accordance with the manufacturer's instructions.
- Develop written safe work procedures for work on portable light towers. Consider using a hazard assessment to establish such procedures.
- Ensure that young workers receive workplace-specific orientation before they begin work, as well as adequate training on any equipment they will be using.

Workers

- When testing electrical equipment, ensure that you are qualified and authorized to perform the testing, and that the voltage rating on testing tools matches the voltage of the item being tested.

Relevant legislation: Occupational Health and Safety Regulation, sections 4.3(2)(a), 3.3(b),(c), 19.10(2)(a), 3.23, and 19.10(2)(a). Other sections may also apply to this incident.

For assistance and information on workplace health and safety, call toll-free within B.C. 1.888.621.SAFE (7233) or visit our website at worksafebc.com. To request a copy of the complete investigation report, contact the WorkSafeBC Freedom of Information and Protection of Privacy office toll-free at 1.866.266.9405.