

Electric Vehicle (EV) Battery Hazards

Electric vehicles (EVs) have high-voltage electrical systems consisting of capacitors, cables, and lithium-ion (li-ion) batteries. EV batteries typically range from 200 to 800 volts. Workers can be injured by contact with the electricity from compromised lithium-ion batteries.

Damaged high-voltage electrical systems can also energize other components of an electric vehicle, posing a risk to workers of electric shock, electrical burns, or even electrocution. A damaged high-voltage battery can short circuit, catch fire, and explode. This type of fire can be difficult to extinguish, and the damaged battery can reignite a long time after the fire is initially put out. Whether they burn and create fumes, or crack and leak, damaged batteries release toxic substances.



Any worker exposed to a damaged EV is at risk. Such workers include:

- First responders
- Tow truck drivers
- Auto repair technicians / Body shop personnel
- Recycling facility staff
- Insurance damage estimators
- Vehicle operators (including Battery electric equipment in workplaces) and passengers

Damaged EV batteries are hazardous in three main ways. Each poses different risks to workers.

Uncontrolled release of energy	Damaged high-voltage electrical systems can energize other components of an electric vehicle, posing a risk of electric shock, or even electrocution, and electrical burns.
Fire & explosion	Damaged batteries can short-circuit and catch fire, and even explode. Li-ion batteries burn hotter and faster than other fuel sources and can reignite after the fire is extinguished. Electrolyte leaked from these batteries is also flammable.
Fumes or leaks of toxic substances	Fumes from burning li-ion battery (containing, for example, CO ₂ , CO, NO, NO ₂ , HCl, HCN, hydrocarbons, and HF) may cause irritation, illness, or death. Skin contact with leaked electrolytes and HF can cause irritation or burns.

If you use EV vehicles in your workplace, it's time to do some research by clicking the links below.

- Workplace Safety and Prevention Services - [Safety Hazards Associate with working on/around batteries](#)
- Workplace Safety and Prevention Services - [A primer on hazards of working with battery electric vehicles](#)
- Workplace Safety North - [Battery Electric Vehicles](#)
- CCOHS.ca - [Plugging into Electric Vehicle Battery Safety](#)

Court Bulletins Fatalities

Review the bulletin below and click on the link to know more if this hazard could occur in your workplace.



[Aug 26 Working @ Heights Fatality - Integrated Solutions Inc., Fined \\$100,000.](#)

While installing a satellite dish on the roof of a residence a worker securing a satellite cable near the bottom of the roof slope fell from the roof, suffering fatal injuries. An investigation found that the worker had not been using any form of fall protection.

The employer failed to take every precaution reasonable in the circumstances for the protection of a worker, contrary to S 25(2)(h) of the OHSA.

[Aug 7 Stuck by Critical Injury and Struck by Fatality - National Steel Car Limited Fined \\$290,000.](#)

A worker moving scrap metal with a gantry crane was critically injured when a piece of metal fell from the crane's magnet. The employer failed to ensure the magnet was thoroughly examined by a competent person to determine its capability of handling the maximum load as rated, as required by S 51(1)(b) of Reg. 851, contrary to S 25(1)(c) of the OHSA.

In a separate incident a few days later, a different worker was fatally injured by a falling bulkhead panel while welding it to the floor of a railcar. An investigation found that if the diagonal bulkhead alignment bars had been installed prior to welding, the panel would not have fallen when the link broke.

The company failed to ensure the panel was secured against tipping or falling, as required by S 46 of Reg. 851, contrary to S 25(1)(c) of the Occupational Health and Safety Act.

Upcoming Courses 98 Fielding Road, Lively, - 290 Armstrong St New Liskeard

Working at Heights

- Sept 6 @ 8:30 am - 4:30 pm
- Sept 9 @ 8:30 am - 4:30 pm
- Sept 16 @ 8:30 am - 4:30 pm
- Sept 23 @ 8:30 am - 4:30 pm

Working at Heights Refresher

- Sept 4 @ 8:00 am - 12:00 pm
- Sept 11 @ 8:00 am - 12:00 pm
- Sept 18 @ 8:00 am - 12:00 pm
- Sept 25 8:00 am - 12:00 pm

Overhead Crane

- Sept 12 @ 8:00 am—4:30 pm

Mobile Elevated Work Platform (MEWP)

- Sept 3 @ 8:00 am - 4:30 pm
- Sept 19 @ 8:00 am - 4:30 pm

Common Core - Non-Production 810090

- Sept 10 @ 8:00am - 12:30 pm Lively

Upcoming Courses 290 Armstrong St New Liskeard

Working at Heights

- Sept 4 @ 8:30 am - 4:30 pm

NATT Safety Services provides safety training and industrial services.

Our training includes CPO-Approved Working at Heights, Confined Space, Power Elevated Work Platform, Forklift, Indoor Fire Extinguisher Simulator training, and much more. We also have several online training courses available. Contact us for a custom quote.

For more information about our safety training and services, [contact us today!](#)

To Register access [Click Here](#)

Court Bulletins Critical Injuries

Review the bulletin below and click on the link to know more if this hazard could occur in your workplace.



[Aug 26 Critical Injury - Fortis Construction Group Inc., Fined \\$85,000, Vito Masonry Ltd., Fined \\$40,000](#)

A freestanding interior masonry block wall, 54 feet long and 13.5 feet tall, was completed. The wall was not braced by either the constructor or the masonry and bricklaying contractor. Workers from both companies were on the second floor of the building. The weather that morning was unremarkable. In the early afternoon, the weather changed, with wind speed reaching over 32 km/h. During that time, a section of the unbraced masonry block wall collapsed, injuring two workers.

The constructor failed to ensure that the wall was adequately braced as required by S31(1)(b) of Reg. 213, a violation of S 23(1)(b) of the OHSA. The employer, to ensure that the wall was adequately braced as required by S 31(1)(b) of Reg. 213, a violation of S 25(1)(b) of the OHSA.

[Aug 26 Hit by Load Critical Injury - Claridge Homes Inc., Fined \\$55,000](#)

A worker from a company that had been subcontracted to work on the project was helping to hoist a peri box filled with formwork components up to the upper slab. As the load lifted, it began to swing and move towards the worker, causing a critical injury.

An investigation determined that the constructor failed to ensure that a tag line/guide rope was used to prevent the peri box from swinging towards the worker, as required by S 179(1) of Reg. 213. As such, the constructor breached its duties under S 23(1)(a) of the OHSA.

[Aug 14 Unsecured Load Critical Injury - Gary D. Robinson Contracting Ltd., Fined \\$55,000](#)

While loading open web steel trusses onto a lowboy trailer, a worker was walking along a stack of trusses on the trailer to unchain the most recently lifted truss when they felt the truss underneath their feet shift and jumped off the trailer. A truss then slid and fell off the trailer striking the worker and causing a critical injury.

An investigation found that the trusses involved in the incident were wet, not secured on the trailer and were stacked metal-on-metal without any dunnage placed in between each truss to prevent slipping.

The employer failed to ensure that steel trusses were transported, placed or stored in a manner that would not tip, collapse or fall, as required by S 45(b)(i) of Reg. 851, a violation of S 25(1)(c) of the OHSA.

[Aug 9 Carbon Monoxide Critical Injury - BNE Concrete Floors & Coatings Inc., Fined \\$70,000](#)

A worker was operating a polishing machine that used an internal combustion engine that burned propane. After running the machine for approximately 2.5 hours, the worker began to feel unwell and lost consciousness after leaving the room due to the lack of ventilation in the room.

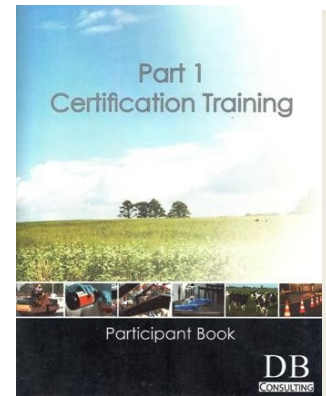
The employer failed to ensure that the measures and procedures prescribed under S 47(2) of Reg. 213 were followed, contrary to S 25(1)(c) of the OHSA. The fine imposed was \$65,000.

The company also failed, to immediately notify an inspector of a critical injury at the workplace contrary to S 51(1) of the OHSA. The MLITSD was not made aware of the incident until six days later, and the scene had not been preserved which resulted in an additional fine of \$5,000.

Joint Health and Safety Training (In Class and Distance Learning)

Safetyscope can help with:

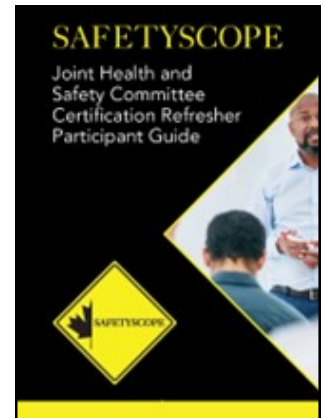
- In Class sessions for DBC Inc. JHSC Part 1 and JHSC Part 2
- Distance Learning (Virtual) Refresher training utilizing DBC Inc. approved training
- In Class sessions for Safetyscope JHSC Refresher Training



Safetyscope is an approved provider

We have continued to expand our scope and now Safetyscope is an approved provider for the following:

- Safetyscope is an approved provider for JHSC Refresher Training
- Safetyscope is an approved provider for Working @ Heights Training
- Safetyscope is an approved provider for W@H Refresher Training
- Toronto Water Approved Provider for Working at Heights
- TSSA Approved Training Provider
- Corrections Canada Approved provider for



Safetyscope's and NATT Safety Services Public Training Locations

[2501 Rutherford Road Unit 22](#) Vaughan, ON 416.231.3752

[98 Fielding Road Lively, ON](#) Toll Free 1.866.244.3334

Unit 1, 3524 Coons Rd. Brockville, ON 1.888.294.1943

117 White Oak Drive East, Sault Ste. Marie, ON 249.889.6160



Safetyscope Continuing to Maintaining Registration as an OWWCO Training Provider

These courses meet the criteria in subsection 29(4) of O.Reg. 128, Certification of Drinking Water System Operators and Water Quality Analysts. On Completion of training all participants will receive a certificate of completion with corresponding CEU Value.

1. Working at Heights	.7 CEU
2. WHMIS	.4 CEU
3. TDG	.4 CEU
4. Working in Confined Spaces Rescue Level	2.8 CEU
5. Confined Spaces Attendant Non Entry	1.3 CEU
6. Confined Spaces Advanced Entrant	.7 CEU
7. Confined Spaces Attendant Refresher	.7 CEU
8. Confined Spaces Rescue Refresher	.7 CEU
9. Standard First Aid	1.4 CEU
10. Self Contained Breathing Apparatus	.4 CEU
11. Spill Response	.7 CEU
12. Trenching Hazards	.4 CEU



SAFETYSCOPE



2024 SCHEDULE

First Day Attendant Course
Time: 8:00 am – 4:00 pm
Second Day ½ day Entrance Course
Time: 8:00 am – 12:00 pm

January	22 - 23
February	12 - 13
March	18 - 19
April	15 - 16
May	13 - 14
June	17 - 18
July	15 - 16
August	12 - 13
September	16 - 17
October	14 - 15
November	11 - 12
December	16 - 17



Competent Supervisor
1 Day Course

Time: 8:00 am – 4:00 pm
 February 28
 April 25
 June 27
 August 29
 October 24



Day 1 - Emergency Level/Recertification
Day 2 - Standard First Aid Level C

Time: 8:00 am – 4:00 pm
 February 5 - 6
 May 6 - 7
 August 5 - 6
 November 4 - 5



Working At Heights
1 Day Course

Time: 8:00 am – 4:00 pm

January	12 & 26
February	9 & 23
March	8 & 22
April	12 & 26
May	10 & 24
June	7 & 21
July	5 & 19
August	2, 16 & 30
September	13 & 27
October	11 & 25
November	8 & 22
December	6 & 20



Working At Heights Refresher
1/2 Day Course

Time: 8:00 am – 12:00 pm

January	5 & 19
February	2 & 16
March	1 & 15
April	5 & 19
May	3, 17, & 31
June	14 & 28
July	12 & 26
August	9 & 23
September	6 & 20
October	4 & 18
November	1, 15 & 29
December	13 & 27



JHSC Part 1 Certification
Dwight Barratt Inc. - 3 Day Course
Time: 8:00 am – 4:00 pm

March	25 - 27
August	19 - 21
November	25 - 27



Part 2 and Refresher also available

Confined Space Rescue
4 Day Course

Time: 8:00 am – 4:00 pm

May 27 - 30
 December 9 - 12



Course held at the SafetyScope Training Centre
 2501 Rutherford Road Unit 22 Vaughan, Ontario L4K 2N6
 Phone: 416.231.3752 E-mail: info@safetyscope.net