Fatalities and contacts with electrical distribution equipment

Fatalities come from electrocution and/or burns

Between 2012 and 2021, there were 53 electrocution fatalities, of which 47% occurred with electrical distribution equipment.

Victims of fatalities were almost all male, between 20-39 years of age.

Electrical distribution incidents

Electrical distribution equipment includes electrical equipment and devices used by Local Distribution Companies (LDCs), privately owned companies, or property owners that distribute electricity to customers’ facilities or buildings.

Electrical distribution equipment include, but isn’t limited to, overhead and underground powerlines, substations, vaults, high-voltage switchgear, and transformers.

Electrical distribution equipment often carries powerful electrical energy. If barriers are breached around this equipment, this often leads to fatalities.

Between 2012 and 2021, 75% of electrical distribution equipment-related electrocutions were due to contact with powerlines.
When comparing 2017-2021 to 2012-2016 time period, the rate of powerline fatalities has increased by **25%**.

In 2021, the general public and the construction sector reported the highest number of powerline contacts.

**Harm reduction priorities – overhead powerline contact**

The overhead powerline **five-year rolling average** for contacts has increased **32%** between 2012-2016 and 2017-2021 (from an average of 120 to 158 incidents of powerline contact).

**ESA’s work on electrical distribution equipment safety**

**REACTIVE**

- Monitor reportable serious electrical incidents related to utility equipment from LDCs and the public
- Investigate serious electrical incidents
- Provide education to industry sectors that have been associated with higher numbers of powerline contact (haulage industry, arborists, transportation)

**PROACTIVE**

- Use the Harm Life Cycle approach to monitor, identify and assess electrical harms and risks in Ontario
- Review and participate in redeveloping regulations and standards
- Provide electrical safety awareness to those in trade colleges that offer heavy equipment operator training
- Promote safety messages to our LDCs, contractor community and partners using traditional and digital/social media
- Work with our safety partners, including our safety partners, to communicate safety trends and identifying emerging areas of focus

Learn more about Electrical-related fatalities and injuries at work at https://esasafe.com/