

Electrical Hazards Awareness Program

The Electrical Hazard Awareness Program (EHAP) provides the knowledge necessary for arborists who must work around overhead conductors and live wires to avoid the electrical hazard. The EHAP program includes both written and video training.

Trainees will acquire a greater understanding of risks and protection measures associated with working in proximity to electrical conductors. They will be familiar with the unsafe acts responsible for most accidents and the proper work procedures to use in their place. Trainees will also have an Electrical Hazards Awareness Home Study Course, which they can use for reference or complete by studying independently or with coworkers.

The Training

Trainees will receive 6.5 hours of “seat time” training, which will be a combination of lecture, discussion, video viewing, case studies and a small group process on emergency response and rescue techniques. Topic categories covered will include Electricity and the Utility Industry, Electrical Hardware Recognition, Recognizing Electrical Hazards, Utility Response Protocols, Work Practices Near Utility Conductors, and Emergency Response and Rescue Safety Standards.

The training materials focus on behavior modifications and reworking of the unsafe acts associated with each type of electrical contact including:

- Basic awareness and avoidance of electrical hazards (workers and crews often fail to recognize electrical hazards)
- Phase-to-phase (if a tree or tree worker causes electrical current to flow between two energized conductors)
- Phase-to-ground (if a tree contacts an energized power line, the tree may become energized and create a path to the ground)
- Direct contact (if some part of the worker’s body contacts the energized conductor).
- Indirect contact (if the worker indirectly contacts a conductor through a conductive object)
- Ground fault (fault, or insulation failure, in an electrical conductor that creates a path to ground and allows for the accidental discharge of electrical current).
- Step potential (the voltage between the feet of a person standing near an energized grounded object. It is equal to the difference in voltage, given by the voltage distribution curve, between two points at different distances from the "electrode". A person could be at risk of injury during a fault simply by standing near the grounding point).