

ELECTRIC SHOCK AND HIGH VOLTAGE POWER LINES

The Myth:

Overhead high voltage power lines are safe.

The Facts:

- Towers, fences, heavy equipment, trailers, pipelines and many other metal structures and products can become electrically energized by overhead high voltage power lines. These lines and towers are particularly hazardous during lightning storms (NACE International 2005).
- People living, walking or playing near high voltage power lines are susceptible to fatal electric shock due to induced currents in metal objects including vehicles, bicycles, metal toys, chain-link and barb wire fences, metal storage sheds, metal-frame patio furniture and many other products.
- Hazards from overhead high voltage power lines can vary from a mild electrical shock to a major shock where the heart goes into ventricular fibrillation. Immediate assistance is often necessary to restore heartbeat and breathing. At higher currents, an individual may suffer burns and severe muscular contractions. Often, the heart may restart, but breathing will not (NACE International 2005).
- Overhead high voltage power lines built near residential development can result in children playing near this line in their back yard or on the power line right-of-way suffering a fatal shock through any number of activities. This risk is multiplied many-fold when these lines are built adjacent to schools.
- Utility workers are particularly susceptible to electric shock. For example, the risk of mortality from electrical accidents among men employed in utility companies in Denmark was 10 times that in the general population (Johansen and Olsen 1998).
- Electrical shocks resulting from overhead power lines can be extremely hazardous. At least 6 U.S. states have set standards for transmission line electric fields, and 2 of these have also set standards for magnetic fields (EMFRAPID 2002).
- Hundreds of high voltage power lines and towers have fallen over during tornadoes and ice storms in Canada, Alberta and Edmonton. The fallen structures, uncontrolled electric currents and electricity loss to customers were hazardous. See RETA Fact Sheet No. 15 for more details.



For information
on what you can do
go to www.reta.ca

RETA
Responsible Electricity
Transmission for Albertans