

Death of a 14-year-old boy from electrocution

A 14-year-old died July 20, 1998, after he was electrocuted while operating a personal computer at his home.

The computer, which had a three-pin plug, was plugged into an unapproved power bar. The ground pin of the power bar's plug had been broken off so it would fit into the home's two pin receptacles (ungrounded system). The power bar had an internal manufacturing defect which allowed the computer to operate normally, while at the same time energizing the metal casing of the computer to 120 V. The internal defect in the power bar would not have caused problems if the circuit had been protected with a proper ground connection. The boy was electrocuted when he touched a metallic part on the computer.

A tragedy like this can be avoided if people remember the following advice:

1. Do not remove the ground pin on plugs. If the ground pin is broken, it should be repaired/replaced immediately.
2. Always use equipment clearly marked as approved for use in Ontario. The Electrical Safety Authority website has resources on Electrical Product Safety and a complete list of Recognized Certification Marks, <https://esasafe.com/electrical-products/recognized-certification-marks/>

Older homes with receptacles that do not accept three-pin plugs, but require them should have grounded receptacles or Ground Fault Circuit Interrupter (GFCI) receptacles types installed which accept three-pin plugs.