

Safety and health alert

55/99 Hair dryer gives hairdresser electric shock

Incident

A hairdresser was temporarily paralysed by an electric shock from a "Mico" brand wall-mounted hair dryer, in a hair salon during August 1999.

The hairdresser stood on a chair to return the hair dryer to a lowered position. She turned on the power to the hair dryer and grasped the raised arm of the unit. She received an electric shock that convulsed her arm muscles so she could not remove her hand from the unit.

Her employer was nearby and switched off the power despite also receiving an electric shock. The hairdresser fell to the floor, injuring her back. She was taken to hospital.

Factors

1. Investigations by WorkSafe Western Australia and the Office of Energy revealed that wires inside the hair dryer arm had twisted free of their connections allowing arcing across exposed conductors. The wires became twisted because pins designed to prevent the hair dryer head from rotating 360 degrees were missing.
2. The hair dryer was not earthed as required by Australian/New Zealand Standard 3100 - 1997, clause 5.3.
3. The power outlet was incorrectly wired with the active and neutral conductors reversed.
4. The dryer circuit was not fitted with a residual current device (RCD).

Recommendations

1. All hair dryers of this type should be examined immediately by licensed electrical workers.
2. All wall mounted hair dryers should be protected by RCDs.
3. All electrical equipment should be regularly maintained in accordance with Australian Standard 3760.
4. All portable and hand-held electrical equipment, such as hand-held hair dryers, must be protected by RCDs under the Occupational Safety and Health legislation.
5. All workplaces should have persons trained in first aid available for assistance in emergencies.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.

