

# Safety and health alert

# 11/01 Electrical hazards when working on mains water supplies

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## Incident

A number of incidents have been reported where personnel working at premises where the mains water supply has been connected, using metal water piping, have received electric shocks while installing water meters or repairing the mains water supply connection.

## Factors

The main contributing factor in these incidents is that a fault with the electrical supply in the area has caused the metal piping used to connect the water supply to become "live". When a plumber, or other person, cuts the metal piping they receive a shock from the electrical current running through the pipe.

## Recommendations

Prior to installation of water meters, or the repair/replacement of metal water piping, plumbers and their assistants should:

- thoroughly clean a section of pipe on each side of the length being repaired (this should remove the surface coating and any debris);
- attach a bridging conductor (stranded copper cable with approach end clamps, capable of carrying 70 amperes) to span the length of pipe to be cut;
- ensure the clamps make good physical contact with the cleaned areas of the metal pipe;
- ensure the bridging conductor remains undisturbed until the work is finished; and
- immediately notify Western Power and the person responsible for the management of the worksite (usually the householder) if any electrical fault is suspected.

**Note:** Only qualified licensed plumbers are allowed to repair, replace or install water services.

## Further Information

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

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