

# NTPC Health & Safety Alert

## Welding Shock



### Background

A worker at an NTPC worksite received two electrical shocks while welding from a scaffold in wet conditions. When he tried to remove the welding rod stub from the electrode holder he received a small shock, likely the result of a poor ground and wet gloves. This caused him to drop the electrode holder – unfortunately it landed in contact with the metal of the scaffold. He grabbed the ground clamp to move it, then held the scaffold with the other hand for support. This completed the circuit between the ground and the electrode giving the worker a much larger shock. He felt sore and nauseous, was assessed by a doctor, and was fortunately released and able to return to work.

### Practical Guidance

Electric shock can occur when the body touches both sides of the welding circuit at the same time (both the ground and the electrode). When working with electrical equipment always consider and control the electrical shock hazard.

- Ensure a solid ground is in place.
- Only wear dry welding gloves that are free of holes.
- Never leave an electrode holder with a stub end in it. This will prevent accidental contact, arcing, or electric shock.
- If shocked while welding stop work immediately, de-energize the welder, and determine why the shock occurred. Correct the issue before continuing work.
- Any injured worker shall consult a Health Care Practitioner.



For more information review *Safe Work Practice 2.06: Hot Work*.