# BURNS: HOT, COLD, CHEMICAL AND ELECTRICAL

## BURN DEPTHS

- **SUPERFICIAL**: The outer layer of skin is burnt causing redness, tenderness and inflammation. The skin is not broken or blistered.
- **PARTIAL THICKNESS**: The outer layer of the skin is burnt and broken causing blistering, swelling, pain and rawness.
- **FULL THICKNESS**: All the layers of skin have been damaged causing the skin to look pale, charred and waxy with fatty deposits. There may also be damage to the nerves.

## WHEN TO GO TO THE HOSPITAL

- For any burns to hands, feet, face and/or genitals.
- All full thickness burns.
- All electrical burns, as the heart's rhythm may have been affected.
- All partial thickness burns more than 1% of body surface (where the casualty's palm represents approximately 1% of their body surface).
- All superficial burns larger than 5% of body surface.
- For burns with a mixed depth pattern.
- For burns that extend all the way around a limb.

## GENERAL TREATMENT

(For further information on specific burn treatment please contact HSD at hs-helpdesk@qmul.ac.uk or visit http://hsd.qmul.ac.uk/)

1. Ensure the area is safe, particularly from the source that created the burn and put on disposable gloves.
   - **Hot liquid or dry heat** (e.g. coffee, fire): Hold the burnt area under running cold water for a minimum of 10 minutes.
   - **Cold liquids or ice** (e.g. liquid nitrogen): Flush the area of skin with tepid water for a minimum of 10 minutes. (Do not apply direct heat or hot water).
   - **Chemical** (e.g. bleach, acid): Flush the area of skin with cool tap water for a minimum of 20 minutes. (If the chemical involved is in powder form, brush it off first).
   - **Electrical** (e.g. faulty appliances): Hold the burned area under running cool water for a minimum of 10 minutes.
2. If possible, remove any watches and/or jewellery from around the affected area.
3. Cover the burnt skin with a dry sterile dressing or cling film. Put the cling film on in a layer over the burn, rather than wrapping it around a limb. A clean clear plastic bag can be used for burns to the hand.
4. If your casualty experiences an increased sensation of burning, re-wash the skin for a further 10 minutes.

## CAUTION

- Do not remove anything sticking to the burn.
- Do not pop any blisters.
- Do not apply any type of lotion or ointment.
- Do not use adhesive dressings or tape.

## EMERGENCY INFORMATION

- If in doubt dial the NHS on 111 and ask for advice.
- For a QMUL first aider dial 3333.
- In an emergency dial 999, and request an ambulance.