Burn injuries/wounds can be serious and should be managed by teams experienced in managing children with these traumas. Most children with burns can be managed as outpatients. Superficial burns normally heal within 10 days without scarring. Burns not healed at 10 days may need consultation with a burns specialist/service to assess the need for surgery and the risk of possible scarring.

The treatment your child needs will depend on the size of the burn wound, the body part involved, the age of the child, and the depth of the burn injury. Special burn dressing products are used to help the wound heal and may be left in place for up to 7 days.

If the burn wound is large in size, deep in depth, very painful or involves particular areas of the body that make it difficult to manage at home, your child may be admitted to hospital so additional therapies can be accessed. Electrical burns often need treatment in hospital.

First aid

Stop the burning process as soon as possible
- Flame burns - put out the fire ("stop, drop, cover (face) and roll"). Do not run.
- Scalds from hot fluids - remove clothing as quickly as possible (as hot fluid soaks into clothing and continues to cause burning). Do not remove clothing if it is stuck to the skin.

Remove jewellery.

Dial 000 if your child is:
- Unconscious
- Having trouble breathing or if they have inhaled hot fluid or the steam from the hot fluid
- Has pain that you cannot control.

In most cases simple first aid and pain relief are all that is needed before seeking medical attention.

Cool the burn wound:
- Apply cool running water over the surface of the burn for 20 minutes - start as soon as possible after the accident. Try to keep non-burn areas of your child warm to prevent them shivering.
- Warm the room (or your car) to 28 - 30°C if possible.
- Do not apply ice, iced water or any other creams or lotions, they are not helpful and may make the burn injury worse.
- Cold water 'misted' over the burn from a spray bottle, may be used while transporting your child to medical help.
- Cold wet cloths are less effective in first aid treatment because they retain heat and need to be rinsed in cold tap water every minute
- If first aid is delayed, applying cool running water to the burn is still helpful up to three hours after the accident.
- By cooling the burn wound you will significantly improve the outcome of the burn injury.
Hospital treatment

- Pain relief/analgesia will be given to your child as needed.
- A dressing is applied to protect the injury from further trauma and to promote healing.
- Burn wounds are reviewed and redressed every 3-7 days (it may take up to 14 days to determine how deep the burn is).
- Burn wounds that have not healed within 14 days should be discussed with a burns specialist service to plan for ongoing treatment.
- Wound dressings may change as the burn starts to heal.
- Home care instructions for your child, together with contact phone numbers will be given to you before discharge.

Pain relief

All burns are painful.

- Cold water provides excellent pain relief if used early.
- Medicine such as Panadol™, Dymadon™ or Tempra™ can give good pain relief.
- If your child’s pain is not able to be managed at home with oral medication, your child needs immediate review by a medical officer. Check if your child is crying for reasons other than pain (e.g. fear, anxiety and hunger).
- Your support will be comforting to them. Listen to their fears and answer their questions truthfully.

What can go wrong?

Infection

Seek immediate medical advice if:

- Your child seems unwell, or won’t eat or drink.
- Your child has a temperature over 38.5 degrees celsius.
- The wound has an offensive odour (bad smell).
- The skin around the wound becomes red and hot to the touch.
- The fluid from the wound increases. There is pain at the site of the burn wound.
- The dressing is dislodged, or completely falls away.

Diet

Encourage your child to eat healthy food. Wholesome nutrients help promote wound healing.

Activity

- Your child should engage in normal play. Accidents which cause pain and require the child to go to hospital can make them feel insecure so extra cuddles are needed.
- Children often feel guilty because they have caused so much trouble. Be patient but continue to have the same important rules at home even if the details are more relaxed.

Will my child need an operation?

In the first few days following a burn, it is often not possible to tell how deep the injury is, how long it will take to heal or if there will be scarring.

Any burn that heals within 10-14 days is unlikely to scar and will probably not need an operation. If much or all of the skin in the area of the burn is destroyed or healing is slow, there is likely to be scarring, so healing may be enabled by an operation. In this operation, the dead skin is removed and the area is then covered with a thin layer of skin taken from another part of the body (a skin graft). A decision about grafting may be made after 10-14 days post the initial injury. The operation will be fully explained to you by the attending Surgeon.

Scarring

If the burn injury has taken longer than 2 to 3 weeks to heal or has required a skin graft, scarring is likely.

With time, burn’s scars may become raised, red, itchy and painful and may cause limitation of movement if over a joint.

Once the burn is healed, treatment of the scar is crucial, to reduce potential limitations to movement and improve the long term appearance of the affected skin.

The Surgical team and physiotherapists will be involved in scar treatment and management.

Keep wound dressings clean and dry.

It is important to avoid your child coming into contact with anyone who has or is developing cold sores on the lips, or has chicken pox (unless your child has had chicken pox or has been vaccinated against it).
**After care**

- All newly healed burns are very sensitive to sunburn.
- Keep burn areas covered and apply Factor 30+ sunscreen.
- If the burn has healed quickly (meaning that it has not been very deep) it will become less sensitive after six to twelve months.
- New skin needs to be kept conditioned by regular use of moisturising cream (use glycerine and sorbolene cream at least twice a day).
- Deep burns will need moisturiser more frequently, for a longer period of time.

**Remember:**

- First aid - first stop the burning process, remove hot clothes and jewellery and apply cool running tap water for 20 minutes.
- Follow the treatment and advice of your doctor to achieve the best possible outcome in terms of appearance and function for your child.
- With good care, most burns heal with minimal scarring.