

## Immediate First Aid for **BITUMEN BURNS**

**1. DO NOT ATTEMPT TO REMOVE ANY BITUMEN**



**2. DO** cool the affected area with cold water for a minimum of 20 minutes. (If cool water is not available, gel pads can be used to cool, applying in the correct manner according to the instructions.) **DO NOT** use ice.



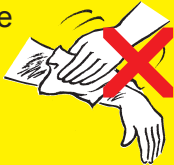
**3. DO NOT** remove clothing that is stuck to the bitumen — this may cause more injury.



**4. DO** remove belts, rings and any other constrictions, provided doing so does not cause further damage to the affected area.



**5. DO NOT** attempt to clean the affected area.



**6. DO NOT** apply lotions or ointments.



**7.** Cover any exposed burns (i.e. those not covered with bitumen) with **clean non-stick dressings or cling film (e.g. Gladwrap)** to exclude the air. Do not wrap dressings too tightly, and **DO NOT** dress areas covered with bitumen.



**8.** The patient may be in shock — keep him/her warm, but **DO NOT** let blankets touch burns or bitumen.



**9.** Eye burns - flush with water (for 20 minutes). **DO NOT REMOVE THE BITUMEN.**



**10.** Unless patient has only superficial burns (minor splashes), he or she should be taken to the nearest Medical Centre or Hospital. **Dial 111** for an ambulance as promptly as possible. Attach one of these cards and, wherever possible, get somebody to telephone ahead to let medical staff know that a bitumen burn case is on the way. Tell them that the attached card has special information on the treatment of bitumen burns.

**11.** An experienced person should accompany the injured party through the system until they reach the specialist burns unit, to prevent incorrect or uneducated removal of bitumen.



**12. DO NOT** give ANYTHING by mouth until cleared to do so by medical personnel.



**SEE REVERSE SIDE FOR MEDICAL INFORMATION ON BITUMEN BURNS**  
This Burn Card has been prepared by Roding New Zealand Inc. and is endorsed by all branches of the New Zealand National Burn Service.  
[www.nationalburnservice.co.nz](http://www.nationalburnservice.co.nz) [www.rodingnz.org.nz](http://www.rodingnz.org.nz)

  
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# BURNS CAUSED BY BITUMEN REQUIRE SPECIAL MEDICAL TREATMENT

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**Christchurch** Ph: 03 364 0640 (ask for plastic surgery registrar on call) Fax: 03 364 0456

## 1. SKIN BURNS

- 1.1 In the event of hot bitumen contacting the skin, no immediate attempt should be made to remove the bitumen (except after admission to hospital and only at the direction of a burns specialist).
- 1.2 Apply cool running water to the burn area for 20 minutes.
- 1.3 Remove any constricting rings, belts etc., and handle the patient gently to prevent further injury.
- 1.4 Cover any exposed burns (i.e. those not covered with bitumen) with clean non-stick dressings or cling film to exclude the air. Be careful not to wrap dressings too tightly around the area. Keep the patient warm.
- 1.5 If there are burns to the face or head ensure that the airways for breathing are kept clear.
- 1.6 Do not apply lotions or ointments.
- 1.7 Do not prick blisters.

## 2. BURNS ENCIRCLING ANY PART OF THE BODY

- 2.1 Where bitumen encircles any part of the body, e.g. a limb, it is theoretically possible for there to be a tourniquet effect as the bitumen cools, though this is generally only with hard grades of bitumen that are not commonly used in New Zealand. Such an effect would diminish blood circulation to the limb - **a potentially serious medical emergency**.
- 2.2 If reduced circulation is evident, elevating the limb will normally reduce the swelling enough to allow satisfactory circulation. If it does not and advanced medical care is more than 20 minutes away it could become necessary to try releasing the tightening effects of the cooling bitumen by carefully splitting the bitumen from the top to the bottom using a heavy pair of scissors. **Extreme caution must be taken** during this procedure to ensure that no damage is caused to the underlying skin. Toes and fingers require individual attention.

## 3. EYE BURNS

- 3.1 The eye must be immediately flushed with cold water. This should be continued for 20 minutes by pouring water or, if available, sterile saline or eye irrigation solution (e.g. "Eyestream") gently over the open eye and away from the unaffected eye.
- 3.2 The cooling process will be most beneficial if it can be done at the same time as the casualty is being transported to hospital.
- 3.3 No attempt should be made by untrained personnel to remove the bitumen.
- 3.4 If the eye needs to be covered with a dressing, apply a sterile eye pad. Stay close, reassure and support the casualty while travelling to seek medical care.

## 4. FURTHER TREATMENT

- 4.1 **No attempt should be made to remove the bitumen which, in itself, supplies a sterile dressing to the underlying burned area of skin.**
- 4.2 The bitumen should be covered with tulle gras dressings and left for two days after which time any bitumen that can easily be removed (that is bitumen which is detached from live dermis), is removed. The remaining burned area to which bitumen adheres is re-covered with sterile tulle gras dressings and left for a further week.
- 4.3 The appearance of the burns when the dressings are first taken off, together with the body surface area involved and the general condition of the patient, will dictate when transfer to a specialised Burns Unit is indicated. Any forced removal of bitumen should only be undertaken in a specially equipped Burns Unit.

## 5. BITUMEN REMOVAL

- 5.1 **If, for special reasons it becomes essential to remove the bitumen, expert advice must be obtained from one of the Burns Units listed above. Under no circumstances should bitumen be removed from a burn without this specialist advice.**
- 5.2 *Note for medical staff:* Should specialist advice indicate that removal of the bitumen is necessary, the recommended medium for bitumen removal is a mixture of 2/3 peanut oil (arachis oil) and 1/3 kerosene. Check for any allergy or intolerance of these materials first. Alternatively liquid paraffin can be used.



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