



The scourge of burns

Here's a new way of looking at your skin: did you know it's the largest organ of your body? This CMScript takes a closer look at burns and how your medical scheme must cover them.

Human skin is made up of three layers:

- epidermis – the outer layer;
- dermis – the layer in the middle where you find the smaller nerves, smaller blood vessels, sweat glands and hair follicles; and
- hypodermis – the deepest layer where you find the large nerves and blood vessels. This layer regulates body temperature.

A burn is any damage to the skin and body tissue caused by heat, chemicals, electricity, sunlight or radiation.

Types of burns

Burn wounds are classified by the depth of tissue damage:

- **First-degree burns** are superficial. They cause local inflammation and the skin remains intact. Symptoms include localised pain, redness, mild swelling and very tender skin. Sunburns mostly fall in this category.
- **Second-degree burns** are more serious and may involve deeper layers of the skin. Symptoms include pain, redness, inflammation and blisters. Burns caused by boiling water normally fall in this category.
- **Third-degree burns** affect all layers of skin tissue and kill the specific area of the skin. Nerves and blood vessels are damaged and the wound appears white and leathery. Third-degree burns are usually relatively painless because nerve endings have been burnt so you cannot feel anything, yet they are the most dangerous type of burn. Examples include severe sunburn and burns caused by chemical spills.

The severity of burns is also measured as a percentage of the total body area affected. The World Health Organisation uses the "Rule of 9's" to calculate the total area that has been burnt.

Only second- and third-degree burns are added together to measure the total body area that is burnt. If more than 15-20% of the body is affected, the various fluids that help make up the body may be lost to such an extent that the person may go into shock.

The guaranteed cover for burns

The prescribed minimum benefits (PMBs) defined in the Medical Schemes Act 131 of 1998 do cover skin burns but the extent of cover is qualified by the percentage of body surface burnt.

The following burn areas are PMB conditions:

- More than 10% of your body
- More than 5% of your head, neck, hands or perineum

Treating burns

If your burn wound qualifies as a PMB condition, your medical scheme must fund the diagnosis, treatment and care of your burn in full – and without touching your savings account.

Treatment required for burn wounds depends on the degree and nature of the burn. Treatment focuses on acute and long-term care.

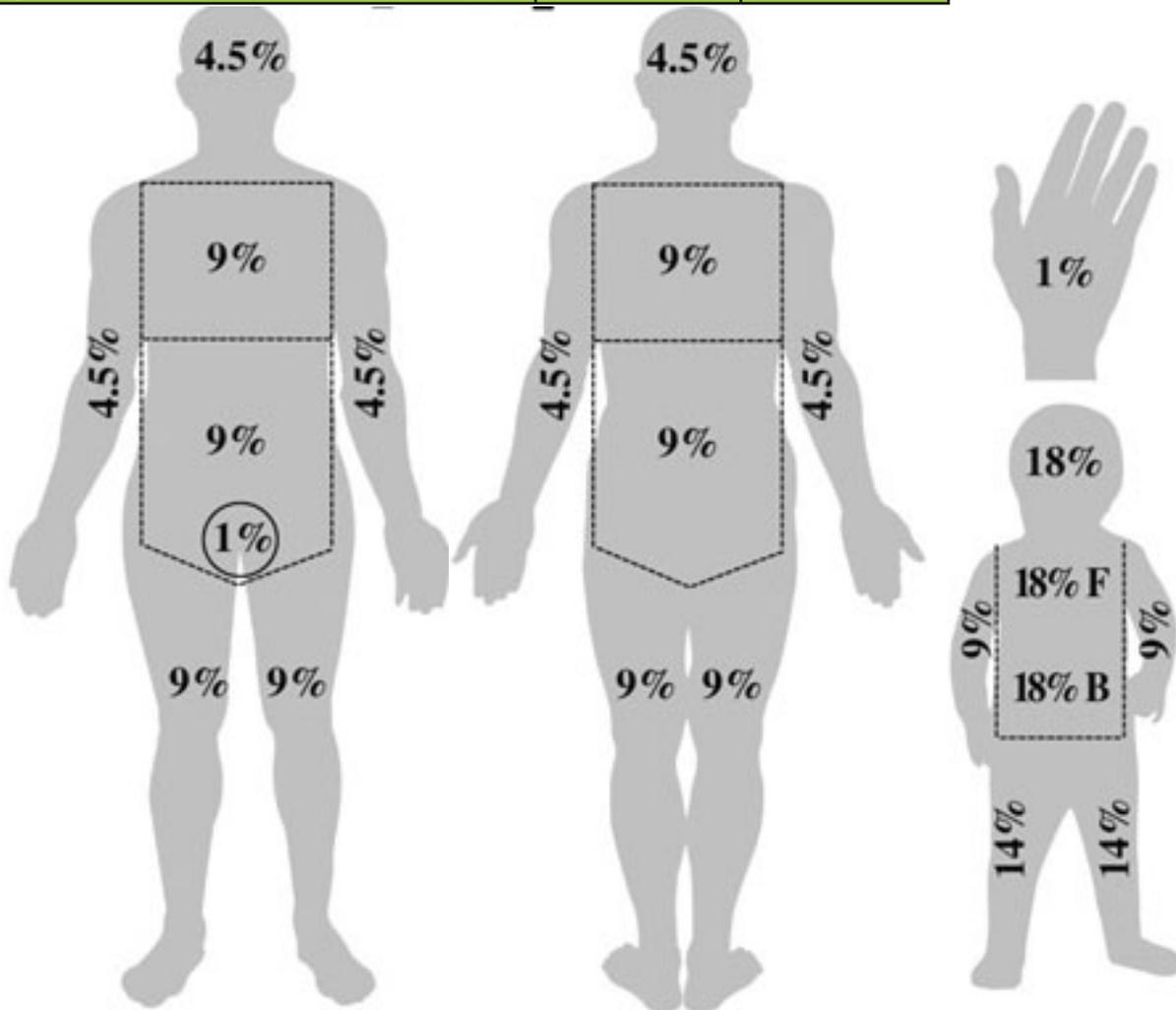
Depending on the nature and severity of the burnt area, treatment may involve:

- hospitalisation, even for prolonged periods of time;
- pain management;
- fluid management (taking fluid orally or intravenously);
- antibiotic medication (taken orally or intravenously);
- wound care, including cleansing the area to prevent infection and covering it with specialised wound dressing;
- cutting away the dead tissue;
- antibiotic cream applied to the wound;
- another tetanus (lockjaw) vaccination;
- surgical skin grafts (during the acute management phase as they assist in the healing process and/or months or even years after the initial injury);
- surgical management of contractures (abnormal shortening of muscle tissue which renders the muscle highly resistant to passive stretching and impairs movement);
- rehabilitation therapy such as physiotherapy, occupational therapy and speech therapy;
- after care (which may include the use of pressure garments and splints to prevent the forming of contractures); and
- psychological treatment (often needed to deal with the trauma of the incident and the effects of sustaining burn injuries).

Burns may lead to medical complications such as an infection of the wound or shock. All complications must be treated as clinically appropriate and must be funded as part of your PMB entitlements.

Body parts	In adults	In children
Head	9%	18%
Chest (front)	9%	
Abdomen (front)	9%	
Torso (back)		18%
Torso (front)		18%
Upper/mid/low back and buttocks	9%	
Each arm	9%	9%
Each palm	1%	
Groin	1%	
Leg	18%	

Left and below: Rule of 9's method used by the World Health Organisation (WHO) to calculate the total area that has been burnt.



information@medicalschemes.com

Hotline: 0861 123 267
Fax: 012 430 7644

References

MDCalc (www.mdcalc.com)

The free dictionary (www.thefreedictionary.com)

Image modified from an image courtesy of www.Medinet.com

The clinical information furnished in this article is intended for information purposes only and professional medical advice must be sought in all instances where you believe that you may be suffering from a medical condition. The Council for Medical Schemes is not liable for any prejudice in the event of any person choosing to act or rely on any information published in CMScript without having sought the necessary professional medical advice. The Communications Unit would like to thank Ronelle Smit, Dr Selaelo Mamejja, Dr Boshoff Steenekamp and Annemari van Vuuren for making this edition of CMScript possible.