



Burn injuries in children

Global burns

- Globally, fire-related burns account for approximately **310 000+** deaths annually, with **30%** of victims under the age of 20.
- In 2004, burns accounted for **9.1%** of all child injury deaths; they were the 11th leading cause of death for children between the ages of 1-9.
- Almost **96 000** children were fatally injured from burns in 2004.

African burns

- The rate of child deaths from burns is over **11 times** higher in low- and middle-income countries (**4.3 per 100 000** population) than in high-income countries (**0.4 per 100 000** population).
- In Africa, children under the age of 5 have almost **3 times** the incidence of burn deaths than children worldwide. The burden of burn injury is highest among those children who live in poverty.
- In sub-Saharan Africa, it is estimated that between **18 000** and **30 000** children under the age of 5 die annually as a result of burn-related injuries.

South African burns

- **3.2%** of the population (**1.6 million** people) suffer burns annually. The majority are the urban poor who live in informal settlements.
- **50%** of burn injuries occur among those younger than the age of 20.
- Approximately **1 300 children** (mainly under the age of 3) die each year from burn injuries.
- Male childhood mortality and injury rates are higher than female rates.
- Hot liquid burn injuries are prominent in all age groups, especially among children under the age of 3 (**66%**); a higher proportion of flame burns are seen among adolescents. **47%** of burn injuries in children are caused by electricity and **19%** by paraffin.

BURN:

An injury to the skin or other organic tissue caused by thermal trauma - hot liquids (scalds), hot solids (contact burns), flames (flame burns); also caused by radiation, radioactivity, electricity, friction and chemicals. Respiratory damage resulting from smoke inhalation is also considered to be a burn.

RISK FACTORS:

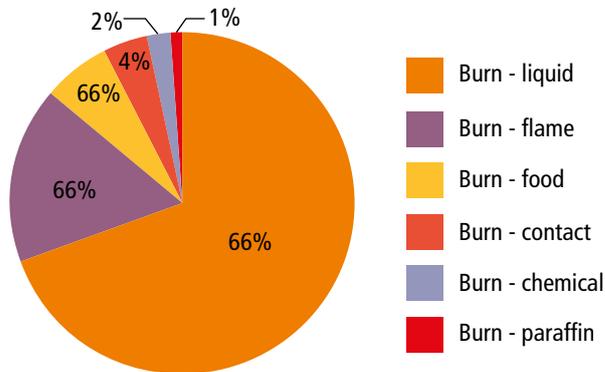
Urbanisation; haphazard urban development; poverty; cramped and combustible living space; inadequate electrification of homes; paraffin used as primary energy source; unsafe paraffin appliances; contaminated fuel; under-regulated supply chains; unsafe household energy practices.

MOST AT RISK:

The very young (under the age of 3 years); slow decline in incidence thereafter, until adolescence when children exposed to activities like cooking and lighting fires and managing heating appliances.



Figure 1: Type of childhood burn injuries



Childhood burn injuries are often the result of the unsafe use of electricity (47%) or paraffin (19%).

Table 1: Child burn occurrence and prevention opportunities (Medical Research Council)

Injury group	Who is affected	Injury agent/s	High risk activities, products and behaviours
Infant scalding	Infants; boys	Hot liquids and foods	Bathing and cooking; hot water geysers without temperature control; not keeping children away from hot liquids
Toddler scalding	Toddlers; girls	Hot liquids and foods	Bathing, cooking or cleaning; portable stoves and paraffin stoves
Older children with flame burns	Preschool; school-going; girls	Flames	Cooking and lighting of fires; portable and paraffin stoves
Older children with mixed aetiologies	Toddlers; school-going; boys	Hot objects; electrification; and to lesser extent, flames	Outdoor play and experimentation; portable and paraffin stoves

What can be done?

Legislation, regulation and enforcement; product modification; environmental modification; safety devices; education skills and behaviour change; emergency medical care.

References

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