In Western Australia 2007 › 2011 there were 47 DEATHS DUE TO BURNS & SCALDS

**Hospitalisations**
- 2008 › 2012: 3,468
- Male: 65%
- Age Range: 0-4 yrs

**Cost**
- 2012: 4,449 Bed Days
- Approx. $8,124,526

**When**
- More Injuries Occur in Jun, Jul & Aug

In Western Australia Aboriginal people make up 3.8% of the population, however between 2008 and 2012 16.6% of Burns and Scalds hospitalisations were Aboriginal People.
**Impact of Burns and Scalds on Western Australia**

**WHO DOES IT IMPACT?**

In Western Australia between 2007 and 2011, there were 47 deaths due to burns and scalds.²

In Western Australia between 2008 and 2012 there were:

- 3468 hospitalisations due to burns and scalds.³
- 65.3% of hospitalisations for burns and scalds were males.³
- people aged 0 - 4 had the highest incidence of burns and scalds.³

In Western Australia Aboriginal People make up 3.8% of the population, however between 2008 and 2012 16.6% of burns and scalds hospitalisations were Aboriginal People.³

**WHEN DOES IT OCCUR?**

In Western Australia between 2008 and 2012, hospitalisations for burns and scalds were greater in June (9.9%), July (9.8%) and August (8.9%).²

**WHERE DOES IT OCCUR?**

In Western Australia, between 2008 and 2012, the three regions with the highest age-standardised rate for hospitalisations for burns and scalds, were the Kimberley (104.3), Wheatbelt (68.1) and Goldfields (66.9).⁴

The age-standardised hospitalisation rates are standardised with the Australian 2001 population and expressed per 100,000 person years.

**IMPACT ON THE HEALTH SYSTEM**

In Western Australia in 2012, there were 861 hospitalisations for burns and scalds, consuming an estimated 4,449 bed days at an approximate cost of $8,124,526.⁴

---

**Definition of Burns and Scalds**

A **burn** is an injury to the skin or other organic tissue primarily caused by heat or due to radiation, radioactivity, electricity, friction or contact with chemicals.¹

A **scald** is a type of burn when hot liquids destroy some or all of the cells in the skin or other tissues.¹
Determinants of Burns and Scalds (Risk / Protective Factors)

SOCIAL DETERMINANTS

INCOME AND SOCIOECONOMIC STATUS

Socioeconomic status is associated with an increased risk of a burn injury. These socioeconomic status factors include ethnicity (non-Caucasian), low income, single parents, low literacy, low maternal education, unemployment, poor living conditions and overcrowding.

OCCUPATION

An individual's risk of burns and scalds is increased due to their occupation. This increased risk is specific to each occupation, for example there is a higher risk of scalds among hospitality workers, electrical burns among electricians and tar burns among builders.

ENVIRONMENTAL, COMMUNITY AND ORGANISATIONAL DETERMINANTS

ENVIRONMENTAL HAZARDS

Houses have a number of burns hazards, which increase the risk of a burn injury. These hazards include hot water, hot drinks, ovens, cook tops, kettles, irons, heaters, open fires, matches, chemicals and electrical outlets.

There are a number of electrical hazards around the home that can cause electrical burns such as electric fires, electric blankets, kettles, irons and faulty power boards.

OPEN FIRES

Open fires increase the risk of a burn injury. Types of open fires include campfires, bonfires and barbecues.

BEHAVIOURAL AND INDIVIDUAL DETERMINANTS

CIGARETTE, ALCOHOL AND DRUG USE

Those who smoke, drink alcohol and use drugs have a significantly higher risk of being injured or dying in a residential fire. Fatal home fires are often traced back to cigarettes, as it is common for house fires to begin by igniting bedding or furnishings.

CHILDREN’S NIGHTWEAR

Children's nightwear including pyjamas, nightshirts, and dressing that do not comply with safety standards have an increased risk of a burn injury or death if the nightwear catches on fire.
Effective Interventions

**LEGISLATION, POLICIES, STANDARDS AND CODES OF PRACTICE**

**SMOKE ALARM LEGISLATION**

Legislation surrounding the installation and active use of smoke alarms in homes has proven to decrease the risk of injuries or death from residential fires.4

*Western Australian example*

Since 1997 the installation of smoke alarms has been mandatory in all new homes and residential properties undergoing major renovations in Western Australia. Since 2009 prior to the sale of existing residential properties and when a new tenant moves into a rental property, mains powered smoke alarms must be fitted.5

**LABELLING ON NIGHTWEAR STANDARD**

Changes to the Australian Standard for warning labels attached to nightwear have led to major reductions in injuries.7

*Western Australian example*

The labelling of children’s nightwear in relation to flammability falls under the Western Australian Fair Trading Act 1987. There are three categories of labelling: “Low fire danger”, “Styled to reduce fire danger” and “Warning – high fire danger – keep away from fire”.4

**ENVIRONMENTAL, COMMUNITY AND ORGANISATIONAL INITIATIVES**

**INSTALLATION AND MAINTENANCE OF SMOKE ALARMS CAMPAIGNS**

Campaigns and community initiatives that advocate for smoke alarms to be; checked monthly; fitted away from areas which may set off false alarms; fitted with long-life lithium batteries or are wired, are all important in the prevention of burns and scalds.4

*Western Australian example*

Don’t be a fool! Change your smoke alarm batteries on April 1, is a campaign run by the Department of Fire and Emergency Services that advocates for the importance of working smoke alarms.

**GROUP AND INDIVIDUAL INITIATIVES**

**CHEMICAL STORAGE TRAINING**

Safe storage of chemicals such as kerosene and petrol reduces the risk of chemical burns, especially in young children.4

*Western Australian example*

The Home Safety Demonstration Home in WA is run by Kidsafe and showcases a safe home environment with a focus on appliances and safe products that support the prevention of injuries in the home. Kidsafe also run a seasonal childhood injury prevention program, with burns and scalds prevention being the primary focus in winter.4
FIRE SKILLS TRAINING

Training for children around appropriate fire safe behaviours, how to react in an emergency and what actions to take when a fire breaks, has proven to increase knowledge around fire skills, however currently there is no research indicating that this behavioural training results in behavioural change in a real life fire situation.¹

Western Australian example

Fire and Emergency Services Authority of Western Australia’s (FESA) Community Safety Division run a variety of campaigns that target schools, community education, environmental issues and incident investigation, which focus on current issues in fire safety.²

Key stakeholders in Western Australia

- Australian Medical Association
- Department of Health Injury Prevention
- Department of Health Public and Population Health Units
- Department of Fire and Emergency Services
- Department of Commerce
- Fiona Stanley Hospital
- Injury Control Council of Western Australia
- Kidsafe Western Australia
- Royal Perth Hospital Burns Service
- UWA School of Surgery Burn Injury Research Unit

For more information download Injury Prevention in Western Australia: A Review of Statewide Activity for Selected Injury Areas
References

3 Department of Health, Western Australia. (2015). Specific health condition analysis. Exposure to smoke, fire, flames, hot substances hospitalisations by external cause (injury and poisoning) – Western Australia State.

Acknowledgement

Know Injury would like to thank the Western Australian Department of Health, Chronic Disease Prevention Directorate and Epidemiology Branch for providing content for these fact sheets.