

# Safety Fact Sheet

## Flammable Clothing



### What is flammable clothing?

Flammable clothing is clothing made of material that catches alight easily. Common flammable clothing for children is associated with sleepwear and includes pyjamas, nighties, dressing gowns, bathrobes, pyjama-style over-garments and all-in-one garments.

### Flammable vs inflammable

Flammable and inflammable mean the same thing. Both words mean that the object is capable of catching fire and burning rapidly. Inflammable is often mistakenly used to mean the opposite of flammable.<sup>1</sup>

### How may a child be injured?

#### Burns

- If a garment catches fire, a child may suffer serious burns. Burn injuries may lead to severe scarring, permanent disability and even death.

### What does clothing flammability mean?

Clothing flammability is the speed at which clothes ignite and the rate at which they burn once ignited. Flammability of clothing depends on<sup>2</sup>:

1. **The fibres** - Cotton and rayon generally burn more easily. Synthetic fibres such as nylon are a somewhat lower risk, however, will melt and stick to the burned skin. Fabrics made from animal hair, pure silk or pure wool have flame resistant properties. This means that they are more difficult to set on fire, however, they will burn once ignited. Fabrics made from plant fibres that are chemically treated, have flame retardant properties. Once again, they take longer to ignite, but will eventually catch fire and are not 'fire-proof' They will extinguish themselves once the flame source is removed. These are the types of fabrics fire fighters use.
2. **Pile or nap** - these surfaces have very loose fibres with significant air space between them. This type of surface ignites easily and the flames spread quickly across the brushed surfaces. Eg. Fluffy, fuzzy fabrics, faux fur, chenille, corduroy, velvet and tassles.
3. **Weave or weight** - in general, heavier fabrics with a tighter weave have a higher flame resistance and are slower to burn.
4. **Clothing design** - Long, loose fitting clothing, such as nightgowns, are more dangerous than close-fitting clothing, as they can swing away from the body and make contact with a flame.

### How common are these injuries?

Between 1999-2000 to 2003-2004, 53 children aged 0-14 in NSW were hospitalised for injuries as a result of clothing and nightwear catching alight.<sup>3</sup>

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### Is there a Law or an Australian Standard for flammable clothing?

The law in Australia states that manufacturer's of all children's nightwear and limited daywear must comply with Australian/New Zealand Standard AS/NZS 1249:2003 - *Children's nightwear and limited daywear having reduced fire hazard*. The standard applies to nightwear from size 00 up to 14.

To comply with the standard there must be a fire hazard information label on the clothing which states one of the following<sup>4</sup>:

**LOW FIRE DANGER**

OR



### Remember:

- Look for the low fire danger label when buying sleepwear and clothing for your child.
- Avoid buying loose sleepwear and clothing which could catch alight easily. Instead, choose close-fitting clothing.
- Keep your child away from fires, radiators, heaters, BBQs, candles, lighters and matches.
- Use guards around fires, radiators and heaters.
- If you make your own children's sleepwear and clothing, look at the safety warnings on patterns. Do not choose fabrics which are fluffy, fuzzy or have loose dangling tassels and avoid using lightweight material.
- If your child's clothing does catch on fire, STOP, DROP, COVER Face and ROLL.

<sup>1</sup> Bartelby Definitions <http://www.bartleby.com/68/20/2520.html>

<sup>2</sup> Oglesbay, F. B. The flammable fabrics problem. *Injury Prevention* 1998;4:317-320.

<sup>3</sup> Hayen, A. Mitchell, R. *NSW Injury Profile: A Review of Injury Hospitalisations During 1989-1990 to 2003-2004*. Sydney: NSW Injury Risk Management Research Centre, The University of New South Wales, 2006.

<sup>4</sup>NSW Office of Fair Trading (2008) *Children's Nightwear Standards*.. Retrieved September 9, 2008 from the World Wide Web: <http://www.fairtrading.nsw.gov.au/>

This fact sheet is for educational purposes only.

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