



## A sample of consumer product related deaths

# NATIONAL CORONERS INFORMATION SYSTEM (NCIS) DATABASE SEARCH

Deaths reported from 01/07/2000 – 30/06/2007

Compiled by: National Coroners Information System  
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## **Authorship Details**

National Coroners Information System

## **NCIS Disclaimer**

This data set does not purport to be representative of all relevant deaths between the time period specified. Due to occasional coding errors, some missing data, and some cases not being closed, it is possible that there are relevant deaths not included in this data set.

Any data provided is for the stated use of the requesting client only. The data report in its entirety should not be published, placed in the public domain, or distributed to any external parties without first obtaining permission from the NCIS.

## **PURPOSE**

The purpose of this report is to provide an overview sample of certain deaths occurring between 1 July 2000 and 30 June 2007 that were contributed to by a faulty, misused or poorly maintained consumer product.

## **METHODOLOGY**

### **Data Source**

The data was obtained through conducting a search of the National Coroners Information System (NCIS). The NCIS is a world first electronic database of coronial information containing case detail information from the coronial files of all Australian states and territories (except Queensland) from 1 July 2000. Queensland data is contained from 1 January 2001.

Authorised users of the NCIS are able to access the database on-line at: [www.ncis.org.au](http://www.ncis.org.au) .

### **Case Identification**

The method used to identify cases was through the use of the NCIS Query Design and Coroners Screen.

1. Search of police and coronial finding documents for the following key words and phrases:
  - "fault"
  - "faulty"
  - "mechanical failure"
  - "product failure"
2. Review of specific objects using Query Design Screen.

Results were downloaded into an Excel spreadsheet and analysed. Duplicate records were removed.

## **LIMITATIONS OF DATA SOURCE**

As the search was dependent upon whether the search terms were contained within the police or coronial finding documents, or whether the Object field was completed, the figures provided may be an under-representation of relevant deaths. This is because not all cases have documentation attached and open cases may not have an object yet coded in the system. It is therefore important to note that this is a sample group of cases only and does not represent all deaths that involve a product.



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NCIS

## Results:

It was found that 81 deaths notified to an Australian coroner between the specified time period had been coded on the NCIS as involving a consumer product which was misused, poorly maintained or faulty.

**Table 1: Number of deaths by Year of reporting**

Year Reported	Total Deaths
2000*	15
2001	9
2002	21
2003	9
2004	12
2005	5
2006	9
2007	1
<b>Total</b>	<b>81</b>

\* from July 2000



**Table 2: Deaths by product & product group**

Product Group	Product	Total
Air conditioner	Air Control System	1
	Air-conditioner / extension cord	2
<b>Air conditioner Total</b>		<b>3</b>
Electrical Appliance	Arc Welder	1
	High pressure water cleaner	1
	Home appliance (child product)	1
<b>Electrical Appliance Total</b>		<b>3</b>
Gas Heater	Gas Heater	3
<b>Gas Heater Total</b>		<b>3</b>
Infant / Child product	Baby Bath	5
	Porta - cot	1
	Pram or stroller	3
<b>Infant / Child product Total</b>		<b>9</b>
Medical Equipment	Fistula	1
	Humidicrib	1
	Intra aortic balloon catheter	1
<b>Medical Equipment Total</b>		<b>3</b>
Other	Lighting	1
	Overhead power lines	1
	Pool Gate / Fence	3
	Power supply	1
	Shower Screen	1
	Spa Bath	2
<b>Other Total</b>		<b>9</b>
Recreational equipment	Basketball Ring	1
	Scuba diving equipment	2
<b>Recreational equipment Total</b>		<b>3</b>
Vehicle related product	Alloy Wheels	1
	Brakes	6
	Carburettor	1
	Car Jacks	29
	Crank Shaft	1
	Interlocking Switch	1
	LPG Tank	1
	Multiple mechanical vehicle faults	1
	Petrol Cap	1
	Seat Belt	1
	Solenoid Relay	1
	Tractor mechanics	2
	Vehicle Ball Joint	1
	Water pump	1
<b>Vehicle related product Total</b>		<b>58</b>
<b>Grand Total</b>		<b>81</b>



**Table 3: Deaths by type of use of product**

<b>Faulty Equipment</b>	<b>Incorrect Use</b>	<b>Maintenance Issue<sup>1</sup></b>	<b>Risk-taking behaviour<sup>2</sup></b>
Air Control System	Basketball Ring	2 x Air-Conditioner	5 x Baby Baths
Arc Welder	29 x Car Jacks	Alloy Wheels	Spa Bath
Crank Shaft	Porta-cot	6 x Brakes	
Fistula	3 x Prams / Strollers	Carburetor	
3 x Gas Heaters	Shower Screen	High pressure water cleaner	
Home Appliance	Stroller	Street Lighting	
Humidicrib		Multiple mechanical vehicle faults	
Interlocking Switch		Overhead power lines	
Intra aortic balloon catheter		Petrol Cap	
Petrol Cap		Pool gate / fence	
2 x Pool Gates / Fences		Power Supply	
2 x Scuba Diving Equipment		Solenoid Relay	
Seat Belt		Spa Bath	
		2 x Tractor Mechanics	
		Vehicle Ball Joint	
		Water Pump	
<b>18</b>	<b>6</b>	<b>22</b>	<b>6</b>

<sup>1</sup> Maintenance issue incorporates those fatalities where a lack of ongoing upkeep and maintenance of the product may have led to the failure of the product

<sup>2</sup> Risk-taking behaviour incorporates those fatalities where the user may have assumed the product allows for extra risks to be taken

## **RECOMMENDATIONS MADE IN RELATION TO DEATHS INVOLVING INFANT AND CHILD PRODUCTS:**

### **SA, 2002**

#### **Recommendations –Infant left unsupervised in a baby bath seat**

- That the question of whether the sale of baby bath seats should be banned, as suggested by the South Australian Injury Surveillance and Control Unit, should be considered nationally by the relevant regulatory agencies in the light of these findings;
  - That, in any event, a strong public awareness campaign should be instituted warning of the dangers created by bathing infants in adult bathtubs, and that an infant should never be left unattended in a bathtub, and that the carer should always remain within arm's length when an infant is in a bathtub.
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### **NSW, 2002**

#### **Recommendation – Infant within a baby bath seat**

- To Minister for Fair Trading. As a matter of urgency that the Department of Fair Trading review the question as to whether baby bath frames/cradles should be withdrawn from sale until and unless satisfied as to their appropriateness and safety.
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### **VIC, 2002**

#### **Recommendation – Infant placed in modified stroller used as a bed**

1. That the AS/NZS pram and stroller standard be modified to require stability to a level of foreseeable use (such as sleeping infant left unattended; restraint not used, and the infant is able to move into different positions along the pram/stroller).
  2. That community awareness be raised on the risk of:
    - Leaving an infant unattended in a pram or stroller that is not in continual view of the carer.
    - Making modifications to the pram or stroller
    - Failure to use the full harness at all times.
  3. That test requirements for AS/NZS 2088:2000 be modified to require a more biofidelic dummy than the currently specified cylinder
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**VIC, 1994 (cited in finding from 2004)**  
**Recommendation – Infant sleeping in a pram**

In an attempt to prevent a repetition of this tragic incident, I adopt the following recommendations suggested by the Accident Research Centre, Monash University.

- That guidelines be prepared in conjunction with the Standards Association, Office of Fair Trading, manufacturers and importers addressing appropriate selection requirements for prams. Once prepared the guidelines should be issued to retailers, hospitals and baby care centres etc.
  - That the use of prams in hospitals be reviewed and that modifications to prams be carried out only after consultation with manufacturers or distributors.
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**VIC, 2006**  
**Recommendation – Infant sleeping in a cot**

In his Recommendations and Comments Coroner Graeme Johnstone, wrote under the heading "Warning for Parents, Grandparents and Other Carers":

*"Generally, family members and carers should examine cots for key safety features prior to use (or purchase). As a first step, parents should look for the Standards Australia logo or mark which signifies the cot complies with the Australian/New Zealand Safety Standard AS/NZS 2172: 1995. The standards have been recently reviewed and the 1995 standard ceases to have effect from 1st November 2006 (the new standard is AS/NZS: 2003, Cots for house use - Safety requirements). However, it should be noted that porta cots do not fall within the existing or new standard on cots. Importantly, in view of the circumstances of this death, it is critical that parents/carers check the construction of cots/porta cots, make sure the mattress firmly and snugly fits into the base and does not leave room for the baby to become wedged between the mattress edge and the cot side. Never use two mattresses or add an additional mattress to a portable cot. This court regularly investigate preventable deaths of children where second hand, poorly designed (from a safety perspective) or maintained nursery furniture contributes to the death. Clearly cots/porta cots are no exception. An example of cots to avoid, whilst they may be attractive, due to age and non-compliance with today's safety standards, older style wooden, antique or collectable cots are dangerous and should never be used."*

In that case Mr Johnstone pointed out, "A search of the National Coroners Information System (NCIS) indicated that there have been 25 deaths associated with cots/porta cots between 1st July 2000 and 10th January 2006. However, this death rate is likely to be an underestimate. It is of serious concern as many of these deaths are probably preventable by the use of cots or porta cots that comply with an appropriate standard.

Mr Johnstone recommended:

*"That it be considered, as a first step, whether an appropriate warning should be delivered to parents, other family members and carers by the Department of Consumer Affairs about the variety of circumstances involving cots/porta cots where deaths occur. There may be a variety of other countermeasures that could be considered by agencies like Consumer Affairs (and/or other key safety authorities/agencies) including:*

- *a requirement for a warning on portable/porta cots about the danger of using a mattress in addition to the one supplied by the manufacturer;*
- *development of brochures for distribution by appropriate health/safety agencies*
- *working with manufacturers and retailers to ensure that, at point of sale the importance of safety issues like only using the correct mattress or ensuring there are no gaps between mattress and cot side are drawn to the consumer's attention (and a brochure is given out)."*

In this case the cot would have been quite safe if its attachments were in place. Both parents were inexperienced. The problem was not a manufacturing deficiency but ignorance of the dangers presented by cots which are not in their original condition. Relevant agencies should consider making soon-to-be parents aware of the types of dangers demonstrated in this and other cases, if this has not already been done. *[the deceased's]* death highlights the necessity to educate forthcoming parents, grandparents and carers, etc. of the danger in purchasing second hand nursery equipment.

## **RECOMMENDATIONS AND FINDING EXCERPTS MADE IN RELATION TO DEATHS INVOLVING CAR JACKS:**

### **NSW, 2001**

#### **RECOMMENDATION - Case involving the elevation of a bus by a jack**

1/ The absence of a documented safe system of work for lifting/jacking a vehicle of this size may have contributed to the causation of this accident. The reliance on past experience has not been a sufficient stimulant to ensure safe work in this instance. Therefore it is recommended that a requirement to maintain safe systems of work be reinforced with the employer and the automotive repair industry.

2/ There is a need to reinforce the use of appropriate stands when working underneath any vehicle supported by a jack or any other means of lifting device.

3/ When parking brakes are disengaged to enable certain work such as adjusting brakes to be undertaken, there needs to be purpose built chocks designed to meet and exceed the likelihood of the vehicle climbing over the chocks.

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### **VIC, 2003**

#### **EXCERPT – Case involving elevation of a car by a scissor jack**

“Senior Constable Simon Borg of the Mechanical Investigation Unit investigated the safety aspect of the jacks. This witness considers that the scissor type jacks are designed solely for use replacing a spare wheel and should not be used to support the vehicle which is being repaired. Warning labels stating “Do not work under car while using jack” were still visible on them. Although the lifting bars on both jacks were bent as were the base plates, there had not been any mechanical failure of these jacks. Senior Constable Simon Borg also inspected one of the hydraulic jacks and found it to be operating satisfactorily...”

It is clear from the evidence that {the deceased} had taken numerous steps to ensure his safety such as placing bricks in front of the vehicle’s front wheels and using four car jacks. Unfortunately his jacks were not appropriate for working beneath the car and there was nothing to prevent the vehicle rolling back slightly resulting in this tragic death.”

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### **VIC, 2002**

#### **EXCERPT**

“It is apparent the deceased has failed to sufficiently secure the vehicle, resulting in it rolling forward, falling off the jacks and the wooden blocks, and collapsing onto him.”

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### **VIC, 2002**

#### **EXCERPT**

“The vehicle was raised sufficiently for [the deceased] to slide under on a trolley known as a creeper, by the use of two ramps and a number of blocks of wood. Whilst working on the vehicle it has dislodged from the wooden supports...”

**VIC, 2002  
EXCERPT**

“[The deceased] jacked up the front end of his vehicle using two wind up jacks, positioning them at the rear of each front wheel. He then proceeded to lay under the vehicle to remove the nut from the sump. This action has caused the vehicle to move from side...both jacks collapsed, causing the vehicle to move left and down onto the deceased.”

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**VIC, 2001  
EXCERPT**

“The deceased had driven the vehicle front wheels onto two ramps in order to work underneath it. It appears that the vehicle slipped down the ramps, trapping the deceased underneath.”

“The evidence indicates the deceased owned two cars. He was experienced at working on his vehicles, and usually took precautions to prevent them moving while he was underneath them. However, in this case the evidence indicates that there were no chocks or blocks around the wheels. The Chevrolet’s automatic transmission was found to be in “drive” and the hand brake had not been applied.”

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**VIC, 2000  
EXCERPT**

“...the deceased was beneath the vehicle which had been raised by a mechanical stand-type jack. The near-side front wheel had been removed from the vehicle.”

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**VIC, 2000  
EXCERPT**

“The investigation revealed that the deceased had propped his motor vehicle up with a scissor jack and a pile of bricks. The front wheels were off the vehicle and he was repairing the tie rod ends. The deceased has struck the undercarriage of the vehicle in the vicinity of the near side tie rod with a hammer. This caused the vehicle to topple off the bricks and the jack onto the deceased...”