

The National Coroners Information System:

10 Years of Contributing to Public Health and Safety

Officially launched in July 2000, the National Coroners Information System (NCIS) has now been in operation for 10 years. With information about almost 200,000 reportable deaths stored on the system, data surrounding these fatalities has been used by death investigators, researchers and government to help identify mortality trends and patterns, and to allow for lessons to be learned from previous tragedies.

This document outlines some of the key contributions the NCIS data collection has made to improving public health and safety over the past 10 years. These achievements would not have been possible without the agencies and individuals listed at the end of this publication.

Evidence based policy and product safety

Self Extinguishing Cigarette Manufacturing Standard

Data about the number of fatalities caused by unintentional cigarette related fires (an average of 11 each year) was sourced from the NCIS and provided to the NSW Fire Brigades during October 2006. This information helped lead to an endorsement by State and Federal Emergency Services Ministers for a national mandatory standard for the manufacture of Reduced Fire Risk (self extinguishing) cigarettes. This standard has since been legislated by Government, and came into effect in March 2010. Any cigarettes manufactured in Australia must now be actively smoked to continue burning, making them less likely to cause fires if dropped or left unattended. The NCIS Unit will be monitoring whether this intervention reduces the number of such house fire deaths in the coming years.



Working Safely Under Vehicles

Data from the NCIS was able to confirm to the Australian Compensation and Consumer Commission (ACCC) in 2005 that incorrectly working under vehicles in a domestic setting was causing a number of preventable fatalities. A joint national safety campaign by the ACCC and the Australian Department of Health and Ageing was subsequently launched, and a safety alert brochure was published. Updated figures in 2008 showed there had been 29 deaths between July 2000 and June 2007 where a deceased was crushed after incorrectly jacking up a vehicle. This data helped support the update of mandatory standards for vehicle jacks, which came into effect in February 2010. The updated standard includes improved warning messages to be placed on vehicle jacks.



Photographer: Chris Sharp.

Slow vehicle run over deaths of children

In 2007, the Queensland Parliamentary Travelsafe Committee (QPTC) used data from the NCIS when investigating slow vehicle run overs of children. The data showed that an average of 9 children (up to the age of 5 years) each year were killed in driveway run overs in Australia. The QPTC accordingly made a number of recommendations to attempt to reduce the number of such deaths, such as new home builders in Queensland should be encouraged to install child-resistant fencing and self-closing gates/doors near driveways. The Queensland Parliament endorsed the recommendations, and also reported they would lobby federal authorities to have reversing sensors installed in all new cars.

Increasing consumer/manufacturer awareness

Child strangulation by blind cords

In July 2004, the national conference of Blind Manufacturers Association of Australia discussed the recent introduction of blind manufacturing regulations in NSW, implemented to try to reduce the number of children unintentionally strangled by looped blind cords. The industry was unaware of any such deaths and therefore wasn't aware of the importance of the regulations. At the conference de-identified case studies of a number of such fatalities sourced from the NCIS were presented, resulting in the safety officer of the Association making the following comments:



Photographer: Suat Eman.

“Using information from the NCIS, I was able to tell the principals of some of the largest blind manufacturers in Australia that children had in fact died, and was able to relate the circumstances of some of the cases in such a way that we could all be motivated to do our best to minimise risks in the future. It has made our job of selling the need for a safety first approach to blind loops to our members, and they in turn to their staff and customers, much easier.”

Peter Schweinsberg
Safety Officer, Blind Makers Association of Australia,
September 2004

Subsequent to this, all States and Territories have enacted similar manufacturing regulations for blinds, with Fair Trading Agencies and the ACCC launching public safety campaigns to increase consumer awareness of the dangers associated with blind cords.

Fire safety at Home

The Federal Minister Hon Chris Pearce (Parliamentary Secretary to the Treasurer) quoted NCIS statistics when launching the 'Fire Safety at Home' booklet in June 2007. NCIS data showed that between 2001 and 2006 more than 840 people died as a result of fire, with almost 200 of those occurring in Victoria.



Holiday safety

The Australian Competition and Consumer Commission (ACCC) referenced data from the NCIS in an Easter Holiday media release in April 2009 to remind the public of risks associated with Do-It-Yourself Maintenance projects around the home. Statistics concerning deaths involving ladders and working under vehicles were provided. *"From 2000-2008, 94 people were killed in falls from ladders. Analysis of data from the National Coroners Information System found that the majority of deaths were people over 50. Many were skilled handyman who had simply become complacent."*

Informing National and State Statistics

Each year, a number of government and non-profit organisations use the NCIS as one of their major sources of information to help compile annual reports about the number of certain types of death. Examples of these reports include:

- National Drowning Report, *Royal LifeSaving Society of Australia*
- Work Related Traumatic Injury Fatalities, *Safe Work Australia*
- Deaths in Australia: National Deaths in Custody Program, *Australian Institute of Criminology*

Contributing to research

Data from the NCIS has contributed to more than 30 academic or research papers published since July 2009. Examples include:

- Brodie, L., Bugeja, L. & Ibrahim, J. (2010). Coroners' Recommendations Following Fatal Heavy Vehicle Crash Investigations. *Australian and New Zealand Journal of Public Health*, 34(2): 136-141.
- Harrison, J., Pointer, S. & Elnour, A. (2009). *A review of suicide statistics in Australia*. Australian Institute of Health and Welfare.
- Kaye, S., Darke, S. & Dufrou, J. (2009). Methylendioxyamphetamine (MDMA)-related fatalities in Australia: Demographics, circumstances, toxicology and major organ pathology. *Drug and Alcohol Dependence*, 104(3): 254-261
- Morgan, D., Ozanne-Smith, J. & Triggs, T. (2009). Direct observation measurement of drowning risk exposure for surf beach bathers. *Journal of Science and Medicine in Sport*. 12 (4): 457-462.

Supporting the coroners to recommend change

One of the primary purposes of the NCIS is to provide coroners with information about the prevalence of specific types of fatality, trends and patterns associated with such deaths and whether previous recommendations have been made by other coroners. This information helps inform coroners as to whether there is a public safety issue surrounding a particular death, and whether recommendations could be made to prevent future deaths. Some examples of coroners using data from the NCIS in this regard over the past 10 years are outlined below.

Aircraft flying into powerlines (joint inquest)

“What is abundantly clear from the evidence is that any aerial operation has inherent risks and those risks are compounded when low level operations are undertaken. Statistics provided by the National Coronial Information System, NCIS, indicates, subject to the accuracy of the data, that 32 fatalities have occurred between 2002 and 2006 as a result of aircraft striking wires. The 32 fatalities involved 15 separate incidents.” *(New South Wales, Finding 1 August 2008)*



Photographer: Simon Howden

Co-sleeping deaths of infants (joint inquest)

“I have compared data obtained from the National Coroners Information System for SIDS and unexplained infant deaths in each State between July 2000 and May 2007 with State populations. Based upon this information Tasmania has the second highest rate of SIDS and potentially preventable infant deaths after the Northern Territory.” *(Tasmania, Finding 28 May 2008)*

Swimming Pool drowning of young children (joint inquest)

“The records of the National Coroners information System also deal with this issue. Those records show that 51 children under the age of 5 years of age died as a result of drowning in private swimming pools or spa’s in New South Wales in the period 2000 to 2008... The average number of such deaths being a little under six (6) each year.” *(NSW, Finding 30 April 2010)*



Directing the resources to the problem

Mental Health Funding in South Australia

In August 2007, the Australian Government announced the allocation of a \$2.2m funding boost for mental health services in the central Australia and Eyre Peninsula in South Australia. The decision to allocate additional resources to these regions has been confirmed to have been influenced by data provided by the NCIS Unit to the SA Mental Health Unit. The data provided frequency of suicides within South Australia according to the Statistical Division of the deceased's residence.

Suicide Prevalence for Local Governments

The ability of the NCIS to provide data based on particular regions of a deceased's residence or incident location is being utilised by local government and non-profit agencies to determine the relative frequency and manner of suicides particular to their region. This tailored information about intentional self harm fatalities in their area allows for support programs to be targeted, funded and directed towards the sections of their community which are at highest risk.



Leading the way

As the first national data collection of coronial data to be developed worldwide, the NCIS has received interest from a number of countries who are keen to replicate the NCIS model.

New Zealand has decided to use the existing NCIS architecture and classification structure for their national coronial data collection. From 1 July 2007 New Zealand has been using the NCIS data dictionary to classify fatalities reported to a coroner, and will soon upload their national data into the existing NCIS database. The NCIS will therefore soon contain information about reportable

deaths from both Australia and New Zealand.

A number of Asia-Pacific nations including Japan and Singapore have been granted trial system access for select forensic practitioners after expressing interest in developing a similar model for their forensic investigations. England has expressed a strong desire for a coronial database similar to the NCIS for their country, once legislative reform of their coronial system takes place.

Canada has independently developed a national collection of coronial and medical examiner information, and discussions between Australian and Canada have identified a number of similarities across the two systems. It is hoped future collaboration and research may take place between Canada and Australia to compare system learnings and fatality data.

"The National Coroners Information System is the most innovative and comprehensive initiative anywhere in the world to make use of Coroners' information, and should underpin all major research initiatives into fatal injury in Australia."

Dr Tim Driscoll, Epidemiologist, University of Sydney, November 2003

Thankyou

During the establishment of the NCIS, and the last 10 years of operation, there have been many people who have graciously provided their time, expertise and support to develop and maintain this national data collection. Whilst we can't name all of them, we are particularly grateful to those below:

Graeme Johnstone, Ron Cahill, Stephen Cordner, David Ranson, Joan Ozanne-Smith, James Harrison, Tim Driscoll, Laurie Glanfield, Penny Armytage, John McNeil, Vicky Winship, Jessica Lightfoot, Helen McKelvie, and Rebecca Smith.

The State/Chief Coroners and the registrars/managers of each Coroner's Court around Australia continue to provide their support for the transfer of coronial data to the NCIS, and clerks within each office do an exceptional job of entering data into the system, often as an additional task on top of their existing workload.

The Victorian Institute of Forensic Medicine (VIFM) continues to manage the NCIS on behalf of the NCIS Board of Management, and has been committed to the concept of the NCIS from the initial days of development. The three Monash Departments which formed the initial consortium to establish the NCIS (the Monash University Accident Research Centre, the Department of Forensic Medicine and the Department of Epidemiology and Preventative Medicine) provided a home and governance structure for the system. Monash University also provided legal support and ethical consideration for research users for the first five years of operation.

Financial and conceptual support from the State and Federal Governments for this system has been critical to its success. Each State and Territory Justice/Attorney-General's Department, the Australian Department of Health and Ageing, the Road Safety Unit within the Australian Transport Safety Bureau (now the Dept of Infrastructure), Safe Work Australia (and all its previous forms), the Australian Institute of Criminology and the Product Safety Unit within the ACCC (previously Treasury) have all provided funding on an ongoing basis over the past 10 years to allow the NCIS to continue.



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