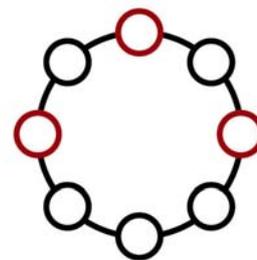


NCIS News

Edition 17 - May 2017



NCIS

NATIONAL CORONIAL INFORMATION SYSTEM

WELCOME

In this edition of NCIS News, we are pleased to announce the upcoming release of NCIS version 5.4, the availability of an online training module for New Zealand coronial staff, as well as the progress and future direction of quality assurance activities at the NCIS. This edition also contains an overview of a research project focussing on venomous bites and stings using NCIS data, and highlights the main areas of interest for research projects and data reports alike.

As always, we love hearing from our users and welcome any feedback. If you would like to comment on any of the items in this newsletter or would like further information, please contact us at ncis@ncis.org.au.

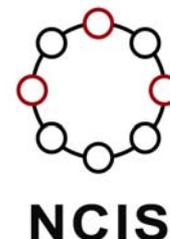
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Justice
and Regulation

The NCIS is governed by a Board of Management. Administrative support is provided by the Victorian Department of Justice & Regulation (DJR). The NCIS is funded by each State/Territory Justice Department in Australia and New Zealand, and the Australian Departments of Health, SafeWork Australia, the Australian Competition & Consumer Commission, the Australian Department of Infrastructure & Regional Development and the Australian Institute of Criminology.



NCIS VERSION 5.4 RELEASE

The NCIS Unit will release the next version of the NCIS web interface before the end of May. The release of the new version involves a number of enhancements to the system, some of which have been outlined below. A more detailed description of all changes will be distributed to NCIS users at the time of release.

- Geocoded data on the NCIS will be updated from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS) and will therefore align with current standards used by the Australian Bureau of Statistics.
- ICD-10AM codes will be available on the NCIS for New Zealand cases courtesy of the New Zealand Ministry of Health. Furthermore, up to seven ICD-10 multiple cause codes can be returned for a case from the Query Design screen, rather than the current underlying cause code only.
- The “Ethnicity” field on the NCIS which is unique to New Zealand will be able to be searched upon and returned using the Query Design screen.
- A label will appear on the Case Details screen where a case has been exempted from the quality review process.

For further information on the next version release, please contact us at ncis@ncis.org.au or call our office on +61 3 9684 4442.

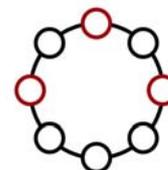
QUALITY ASSURANCE ACTIVITIES

In November 2016, the NCIS Quality Team commenced a six month project that aimed to reduce the number of closed cases awaiting quality review. A core component of the project was the engagement of a Junior QA Assistant for the project period.

At the commencement of the project, there were 29 months of data awaiting quality review. The main areas of impact of this “backlog” were the diminished value of the QA reports provided to jurisdictions as they pertained to cases closed some time ago, and that there were a percentage of closed cases on the NCIS that had not been quality assured.

Over the six month period, the Quality Team reviewed 16 months of data, equalling to 15,500 cases. Due to the success of the project, a second phase of increased QA activity has been commenced and is expected to lead to a further substantial reduction of the “backlog” by the end of the year.

Benefits of the project will include the provision of feedback to the jurisdictions in real-time, the delivery of appropriate education by the NCIS Unit to coders, and increased confidence amongst users that the data has been quality assured.



CODING TIPS NEWSLETTER

The NCIS Quality Team has commenced the production of a quarterly newsletter to provide tips and advice to coders. Each newsletter will focus on a different topic and address some common errors identified in the quality review process.

The first coding tips newsletter for 2017 focuses on coding the contribution of alcohol and/or drugs for deaths reported to a Coroner. It explains when alcohol and drugs should be coded, which drugs should be coded, and how these drugs should be entered into the mechanism and object fields. The newsletter also contains a section where frequently asked questions are answered, and where examples of correct coding for different types of scenarios are provided.

The newsletters are intended to reinforce NCIS coding practices and will also inform third party users about how codes are applied to cases.

We encourage all NCIS users to read the Newsletter, which is available on our website from:
<http://www.ncis.org.au/data-quality/coding-support-and-guidelines/>.

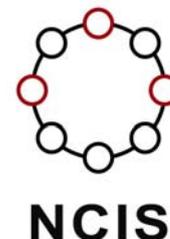
ONLINE TRAINING MODULE

Online training modules are available on the NCIS website to educate staff responsible for data entry into the NCIS. These modules cover topics such as how to enter case details, code the mechanisms and objects involved in the death, as well as linking cases where multiple fatalities resulted from one incident. These modules can be re-visited by staff at any time to consolidate their coding knowledge.

The NCIS Unit recently released a new e-Learning module, which is tailored for staff working within the New Zealand Coroners Court. The module serves as an introduction to the NCIS and provides an overview of the importance of a centralised data repository for Australian and New Zealand coronial cases. Staff can complete this module at their own pace by saving their progress and re-commencing at a later time. In full, it is estimated that the module will take 30 minutes to complete.

It should be noted that while the module includes specific references to New Zealand, the information is fundamentally relevant for all current and potential NCIS users.

The “Introduction for New Zealand Coders” can be accessed from: <http://www.ncis.org.au/data-quality/ncis-coder-online-training/>.



INJURY TRENDS FROM VENOMOUS BITES AND STINGS

Ever wondered what sort of research other users of the NCIS do? Dr Ronelle Welton from the University of Melbourne has been kind enough to summarise the work she has completed using data from the NCIS.

Injury trends from venomous bites and stings in Australia

Accidental injuries are a major public health problem in developed countries, with poisoning and envenoming a subset of this category. Australia has an international reputation for being the epicentre of all things venomous with injuries and deaths caused by venomous snakes and jellyfish often sensationalised in the media. Yet there is a paucity of high resolution data regarding fundamental national public health questions, such as where venomous injuries occur, the reasons for their occurrence, and determinants of their outcomes.

In a first national review of envenoming in Australia, from 2000-2013, the study aimed to provide contemporary epidemiological insight into venomous injuries based on demographics and geography in Australia. Deaths were due to an anaphylactic event (0.16 per 100 000), snake envenoming (0.13 per 100 000) or box jellyfish envenoming (0.01 per 100 000). Only 44% of cases involving anaphylaxis reached medical care prior to death, compared to 74% of those envenomed by snakes. Over half of all deaths (52%) occurred at home, and 64% of these occurred within a major city or inner regional area, with 48% of anaphylaxis deaths work related. Hospital admission rates of 199 per 100 000 persons over the 11 years were caused by contact with wasps or bees (31%), spiders (30%) and snakes (15%) with a predominate age range of people from 30-44 years highly represented.

While envenoming incidents are considered a minor injury, minor injuries make up a large portion of the overall cost of injuries, and some may be both potentially life threatening and challenging to manage.

Variations of injury incidence between States and Territories (data not discussed) indicated a need for a more localised approach for the management of this injury. However, greater resolution of detail for hospital data is required in order to identify localised needs, such as per Primary Health Network. The study showed that most deaths after envenoming occur in settings where access to health services is available. Since distance to hospital appears not to be a major determinant, further research is needed to investigate other factors that contribute to these outcomes. It is also important to improve our capacity to spatially analyse the burden of injury and mortality after envenoming, particularly with regard to environmental, social, ethnic and occupational factors. This approach can potentially lead to enhanced understanding of the determinants of poor outcomes after envenoming, and better inform Federal and State health administrations, health networks, health professionals and the broader community. This will lead to targeted allocation of resources, education strategies and help drive secondary prevention priorities.



INJURY TRENDS FROM VENOMOUS BITES AND STINGS

Dr Ronelle Welton has published a number of papers on this subject, some of which are listed below:

1. Welton RE, Liew D, Braitberg G. Incidence of fatal snakebite in Australia: A coronial based retrospective study (2000-2016). *Toxicon* 2017; 10; 11-15.
2. Welton RE, Williams DJ, Liew D. Injury trends from envenoming in Australia, 2000-2013. *Internal Medicine Journal* 2017; 14(2); 170-176.
3. McGain F*, Welton R*, Solley GO, Winkel KD. First fatalities from tick bite anaphylaxis. *The Journal of Allergy and Clinical Immunology* 2016; 4 (4): 769-770. *equal first authors.
4. Welton RE, Dee D, Williams DJ. Snakes and Latitudes. *Position* 2016; 80: 28-29.

RECENT EVENTS

PHAA - AIPN Injury Prevention Satellite Meeting

A number of representatives from the NCIS attended an evening seminar on "The Role of Coronial Recommendations in Injury Prevention", run by the Public Health Association of Australia Injury Prevention Special Interest Group and the Australian Injury Prevention Network.

The event illuminated the number of active research projects utilising NCIS data, the number of peer-reviewed papers referencing the NCIS, the number of searches performed by third-party researchers and death investigators, as well as the number of reports produced by the NCIS Unit for Coroners and external agencies.

It was acknowledged that the NCIS database had been a useful tool for Coroners and researchers alike when attempting to locate particular types of coronial cases and recommendations about a particular issue.

Overall, the seminar highlighted the benefits of an internet-based data storage and retrieval system for coronial cases when formulating an evidence-base for recommendations that aim to prevent further injuries and deaths.



RESEARCH DATA REPORTS

The NCIS Research Report service continues to experience a high level of productivity, with 27 reports produced in the last quarter, 17 of these being reports for Coroners.

Police pursuit policy is a topic of particular interest across the Australian States and Territories, and the NCIS is pleased to be able to contribute to the evidence base in this area. The NCIS has recently produced reports for the Western Australian State Coroner – Police Pursuit- and Intercept-Related Fatalities in Australia – to inform an inquest into deaths resulting from police pursuits that had occurred in Australia over the last six years. The report provided a range of information for a number of cases, including pursuit times and the extent to which the deceased may have been affected by drugs. The report is expected to assist the joint inquest relating to six fatalities. Coronial staff can request copies of new and existing reports by emailing ncis@ncis.org.au.

Drug-related and intentional self-harm fatalities have generated particular interest, with reports relating to intentional self-harm cases involving the use of helium gas being requested by media and regulatory bodies alike. For example, a report for the Australian Competition & Consumer Commission regarding intentional self-harm deaths involving helium has been produced for use in the development of an application to amend the Poisons Standard, as recommended by a Victorian Coroner.

THIRD PARTY ACCESS APPLICATIONS

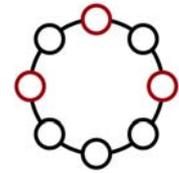
Since December 2016, there have been seven new third party applications to the NCIS. These applications have been received from four different types of research organisations including Academic Institutions, Research Centres, Health and Transport Agencies, and Non-Profit Organisations.

The applications span a range of subject areas including Intentional Self-Harm, Work-Related, Animal-Related, Law Enforcement, and Drugs & Alcohol.

The next NCIS closing date for new and renewing applications is Wednesday 13th June 2017. All applications received by this date will be considered at the JHREC meeting on Thursday 3rd August 2017.

INTERNSHIPS

The NCIS Unit welcomes Richard this year as part of the NCIS internship program. Richard is currently working as a criminology intern while completing a Master of Criminology at the University of Melbourne. He brings particular expertise in relation to drug use and will be conducting research in relation to methamphetamine-related fatalities, in addition to a number of other duties assisting the NCIS research report program.



NCIS STATISTICS

Case closure and Document Attachment Rates for all Australian jurisdictions and New Zealand cases 2000-2017

1. NCIS case closure rates by jurisdiction as of 6th April 2017

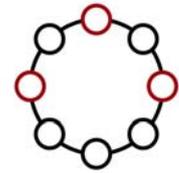
Jurisdiction	% cases closed
ACT	97%
NSW	89%
NT	96%
QLD	92%
SA	94%
TAS	92%
VIC	84%
WA	93%
NZ*	89%

* The NCIS only contains closed cases from New Zealand, however this figure for NZ indicates the proportion of closed cases on the NCIS as a function of all NZ Coronial cases (open and closed), as indicated by the NZ Coronial Services Centre.

2. NCIS case document attachment by jurisdiction as of 6th April 2017

Jurisdiction	Autopsy	Finding	Toxicology	Police
ACT	93%	97%	74%	98%
NSW	74%	62%	67%	54%
NT	93%	96%	73%	97%
QLD	65%	63%	37%	97%
SA	0%	99%	25%	100%
TAS	82%	89%	86%	98%
VIC	94%	91%	97%	88%
WA	76%	97%	90%	100%
NZ	98%	98%	79%	97%

Further detail related to the above statistics are available at:
<http://www.ncis.org.au/data-collection-2/operational-statistics/>



FATAL FACTS

Fatal Facts is a publication produced by the NCIS which summarises coronial cases where a coroner has made recommendations with a view to prevent similar fatalities occurring in the future.

The NCIS *Fatal Facts Search* tool allows users to search on recommendations made by a Coroner across cases closed between 1st May 2007 and 30th September 2012.

You can access *Fatal Facts Search* at www.ncis.org.au.

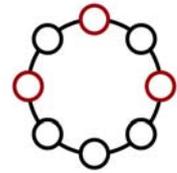
Information about the latest edition of Fatal Facts, published since the last NCIS News is provided below.

Fatal Facts Edition	34
Coverage period (cases closed between)	1st July 2012 - 30th September 2012
Release Date	March 2017
No. of Recommendations	77
- Australian	38
- New Zealand	39
Topics covered	Adverse Medical Effects, Aged Care, Child & Infant Deaths, Drugs & Alcohol, Falls, Homicide & Assault, Intentional Self-Harm, Law Enforcement, Leisure Activity, Mental Illness & Health, Physical Health, Sports Related, Transport & Traffic Related, Water Related, and Work Related.

NCIS DATA REFERENCES

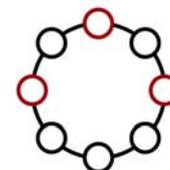
Recent publications that have referenced data from the NCIS include:

- Bellenger, E., Ibrahim, J. E., Bugeja, L., & Kennedy, B. (2017). Physical restraint deaths in a 13-year national cohort of nursing home residents. *Age and Ageing*, 45(6). doi: 10.1093/ageing/afw246
- Aitken, G., Murphy, B., Pilgrim, J., Bugeja, L., Ranson, D., & Ibrahim, J. E. (2017). Frequency of forensic toxicological analysis in external cause deaths among nursing home residents: an analysis of trends. *Forensic Science, Medicine, and Pathology*. doi: 10.1007/s12024-016-9830-9
- Dertadian, G., Iversen, J., Dixon, T. C., Sotiropoulos, K., & Maher, L. (2017). Pharmaceutical opioid use among oral and intravenous users in Australia: A qualitative comparative study. *International Journal of Drug Policy*, 41, 51-58. doi: 10.1016/j.drugpo.2016.12.007
- Petrass, L. A., & Blitvich, J. (2017). Understanding Contributing Factors to Child Drownings in Public Pools in Australia: a Review of National Coronial Records. *International Journal of Aquatic Research and Education*, 10(1). Retrieved from <http://scholarworks.bgsu.edu/ijare/vol10/iss1/3>
- Lilley, R., Kool, B., Davie, G., De Graaf, B., Ameratunga, S. N., Reid, P., ... Branas, C. C. (2017). Preventable injury deaths: identifying opportunities to improve timeliness and reach of emergency healthcare services in New Zealand. *Injury Prevention*. doi: 10.1136/injuryprev-2016-042304
- McIntosh, A., Fortington, L., Patton, D., & Finch, C. (2017). Using National Coronial Data to Identify Priorities for Preventing Death in Sport/Recreation. *British Journal of Sports Medicine*, 51(4), 360. doi: 10.1136/bjsports-2016-097372.192
- McIntosh, A., Fortington, L., Patton, D., & Finch, C. (2017). Extreme Sports, Extreme Risks: Fatalities in Extreme Sports in Australia. *British Journal of Sports Medicine*, 51(4), 360. doi: 10.1136/bjsports-2016-097372.193
- Beck, B., Smith, K., Mercier, E., & Cameron, P. (2017). Clinical review of prehospital trauma deaths - The missing piece of the puzzle. *Injury*, 48(2). doi: 10.1016/j.injury.2017.02.024
- McIntosh, A., Fortington, L., Patton, D., & Finch, C. (2017). Deaths in Organised Sports in Australia: A Case Series Review of the National Coronial Information System. *British Journal of Sports Medicine*, 51(4), 360-361. doi: 10.1136/bjsports-2016-097372.194
- Byard, R. W. (2017). Issues with suicide databases in forensic research. *Forensic Science, Medicine and Pathology*. doi: 10.1007/s12024-017-9859-4
- Banks, J. (2017). Gambling, Problem Gambling, Crime and the Criminal Justice System. *Gambling, Crime and Society*, 63-109. doi: 10.1057/978-1-137-57994-2_3



NCIS DATA REFERENCES (cont.)

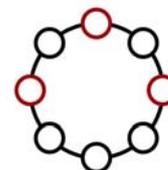
- Austin, A. E., van den Heuvel, C., & Byard, R. W. (2017). Differences in local and national database recordings of deaths from suicide. *Forensic Science, Medicine, and Pathology*. doi: 10.1007/s12024-017-9853-x
- Welton, R., Liew, D., & Braitberg, G. (2017). Incidence of fatal snake bite in Australia: A coronial based retrospective study (2000-2016). *Toxicon*. doi: 10.1016/j.toxicon.2017.03.008
- Martin, W. (2017). The coronial jurisdiction: Lessons for living. *Brief*, 44(2), 42-48. Retrieved from <<http://search.informit.com.au/documentSummary;dn=680101895149897;res=IELAPA>>
- Milner, A., San Too, L., & Spittal, M. J. (2017). Cluster Suicides Among Unemployed Persons in Australia Over the Period 2001-2013. *Social Indicators Research*, 1-13. doi: 10.1007/s11205-017-1604-6
- Kinchin, I., & Doran, C. M. (2017). The Economic Cost of Suicide and Non-Fatal Suicide Behavior in the Australian Workforce and the Potential Impact of a Workplace Suicide Prevention Strategy. *International Journal of Environmental Research and Public Health*, 14(4), 347. doi: 10.3390/ijerph14040347
- Milner, A., Witt, K., Maheen, H., & LaMontagne, A. D. (2017). Access to means of suicide, occupation and the risk of suicide: a national study over 12 years of coronial data. *BMC Psychiatry*, 17(125). doi: 10.1186/s12888-017-1288-0
- Glass, D. C., Del Monaco, A., Pircher, S., Vander Hoorn, S., & Sim, M. R. (2017). Mortality and cancer incidence among male volunteer Australian firefighters. *Occupational & Environmental Medicine*.doi: 10.1136/oemed-2016-104088



NCIS IN THE NEWS

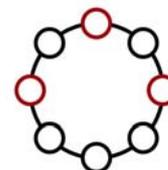
Recent media articles in print, radio and online that have referenced the NCIS include:

- Jones, E. (2017). Two children aged 10 and under are among almost 2200 people who have taken their own lives in SA over an 11-year period. Retrieved January 9, 2017, from <http://www.adelaidenow.com.au/news/south-australia/two-children-aged-10-and-under-are-among-almost-2200-people-who-have-taken-their-own-lives-in-sa-over-an-11-year-period/news-story/308daa5b340bf1f356b7211315be2408>
- Jones, E. (2017). Families share their pain amid figures showing more than 2100 people took their own lives in SA from 2004-2014. Retrieved January 9, 2017, from <http://www.heraldsun.com.au/news/national/as-figures-show-more-than-2100-people-took-their-own-lives-in-sa-from-20042014-families-share-their-pain/news-story/e9371661b3d071f27338a049a115aafb>
- Miletic, D. (2017). Snakes? Spiders? Jellyfish? Nope. Australia's most dangerous animal is the bee. Retrieved January 17, 2017, from <http://www.theage.com.au/national/snakes-spiders-jellyfish-nope-australias-most-dangerous-animal-is-the-bee-20170116-gtsoqo>
- Gardner, J. (2017). Venomous stings and bites lie close to home. Retrieved January 17, 2017, from <https://pursuit.unimelb.edu.au/articles/venomous-stings-and-bites-lie-close-to-home>
- Florance, L. (2017). Forget spiders and snakes, horses are more likely to kill you, study of Australian coronial data shows. Retrieved January 18, 2017, from <http://www.abc.net.au/news/2017-01-17/horse-more-likely-to-kill-you-than-bees-wasps-snakes-spiders/8188842>
- Hunt, E. (2017). Australia's bees and wasps revealed to be as dangerous as its snakes. Retrieved January 18, 2017, from <https://www.theguardian.com/environment/2017/jan/17/australias-bees-and-wasps-revealed-to-be-as-deadly-as-its-snakes>
- Mickelborough, P. (2017). Wife of Echuca cop who died in tragic circumstances sues Victoria Police. Retrieved January 18, 2017, from <http://www.heraldsun.com.au/news/law-order/wife-of-echuca-cop-who-died-in-tragic-circumstances-sues-victoria-police/news-story/b41ddde6e45ff3a7e6693d491b9f72f2>
- Gardner, J. (2017). Australia's most dangerous venom isn't what you'd think. Retrieved January 18, 2017, from <http://www.futurity.org/venomous-creatures-australia-1336802-2/>
- University of Melbourne. (2017). Bess, Insects are Australia's Biggest Health Threat. Retrieved January 18, 2017, from <http://www.laboratoryequipment.com/news/2017/01/bees-insects-are-australias-biggest-health-threat>



NCIS IN THE NEWS (cont.)

- Borkhataria, C. (2017). Researchers warn BEES are actually Australia's most dangerous creature - and reveal most animal attacks happen at home. Retrieved January 23, 2017, from <http://www.dailymail.co.uk/sciencetech/article-4129744/BEES-Australia-s-dangerous-creature.html>
- Dockrill, P. (2017). In Australia, bees and wasps are more dangerous than spiders and snakes. Retrieved January 23, 2017, from <http://www.sciencealert.com/in-australia-bees-and-wasps-are-more-dangerous-than-spiders-and-snakes>
- Lengyel, K. (2017). Bees Among Deadliest Creatures in Australia. Retrieved January 23, 2017, from <http://www.americaveterinarian.com/news/bees-among-deadliest-creatures-in-australia>
- Department of Commerce. (2017). Tripping hazards in the home. Retrieved January 27, 2017, from <https://www.commerce.wa.gov.au/consumer-protection/tipping-hazards-home>
- Vietnam Veterans Association of Australia. (2017). Debrief. Retrieved January 31, 2017, from http://www.vvaa.org.au/debrief/debrief_2017_01.pdf
- Australian Institute of Health and Welfare. (2017). Cancer in Australia 2017. Retrieved February 6, 2017, from <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129558549>
- Motherwell, S. (2017). Animal euthanasia drug killing humans too, coroner warns. Retrieved February 22, 2017, from <http://www.couriermail.com.au/news/queensland/animal-euthanasia-drug-killing-humans-too-coroner-warns/news-story/f5c45d445690b65006c6cd0570066146>
- Motherwell, S. (2017). Calls to regulate animal euthanasia drug. Retrieved February 23, 2017, from <https://au.news.yahoo.com/qld/a/34457406/qld-dog-drug-suicide-findings-due/#page1>
- Caldicott, D. (2017). The 'War On Drugs' Has Been A Deadly Failure. Retrieved February 24, 2017 from <http://www.huffingtonpost.com.au/david-caldicott/there-will-be-more-deaths-until-the-government-realises-its-war/>
- Insider Monkey. (2017). 11 Professions With The Highest Suicide Rates in Australia. Retrieved April 4, 2017, from <http://www.insidermonkey.com/blog/11-professions-with-the-highest-suicide-rates-in-australia-570678/>



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NCIS FEEDBACK

The NCIS welcomes any comments, suggestions or queries about the content of this newsletter or the NCIS generally.

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