NATIONAL CORONIAL INFORMATION SYSTEM



NCIS Annual report

2018-19



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Authorisation

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DIRECTOR'S FORWARD

I am pleased to present the National Coronial Information System Annual report 2018-19.

The past year saw significant progress toward our mission to provide comprehensive coronial data to those who need it and our vision to save lives through the power of data. Key outputs included a new NCIS codeset and the development of a research agenda to guide our research and reporting function.

The NCIS remains in a healthy financial position with the NCIS Trust balance of \$706,389 as at 30 June 2019. We ended the year with an overspend of the operational budget primarily due to employee and IT related costs, and adjustments to depreciation expenditure. The revenue earned from user pays fees decreased from the previous year, contributing 13.7 per cent of the overall operating budget.

The work of the NCIS would not be possible without the support of State and Chief Coroners in Australia and New Zealand and their staff. I thank them wholeheartedly for their ongoing support.

I would also like to thank the justice departments of the Australian States and Territories and New Zealand, and the Australian Commonwealth for their continued financial support that enables the NCIS to continue to provide our service to researchers, Coroners and the broader community.

There were several key staffing changes throughout 2018-19. We farewelled NCIS Director Neil Twist in May 2019. Neil held the position of NCIS Director since the Victorian Department of Justice and Community Safety became the NCIS' host jurisdiction in 2012. Natalie Johnson left the NCIS Manager role in January 2019 to take a secondment opportunity elsewhere in Victorian Government. We welcomed Ally Watson to the Manager role in January 2019 on secondment from the Victorian Department of Justice and Community Safety. We farewelled Lauren Dunstan, NCIS Engagement Manager in June 2019. I thank Neil, Natalie and Lauren for their contributions to the NCIS.

After many years co-located with the Victorian Institute of Management in Southbank, the time has come for the NCIS Unit to move on from the 65 Kavanagh Street site. Work has begun to transition to new offices in the next financial year.

Fiona Dowsley

Director, National Coronial Information System Executive Director, Evidence and Insights, Department of Justice and Community Safety (Vic)

ABOUT THE NCIS

The National Coronial Information System (NCIS) is a secure database of information on deaths reported to a coroner in Australia and New Zealand. Information concerning every death reported to an Australian coroner since July 2000 (January 2001 for Queensland) and a New Zealand coroner since July 2007 is stored within the system.

Data includes demographic information on the deceased, contextual details on the nature of the fatality and searchable medico-legal case reports including the coronial finding, autopsy and toxicology report and police notification of death.

The database is available to coroners to assist investigations and appropriate access is available on application for eligible groups who require coronial data for research or monitoring projects.

The NCIS Unit collects, organises and quality assures Australian and New Zealand coronial data. We produce high-quality reports for use in coronial investigations and research into preventable death and injury. Reports are used to identify trends and similar cases nationally and contribute to health policy development and prevention strategies. We provide annual statistics for government reporting and manage access for approved research and monitoring projects.

Find out more about the NCIS

2018-19 HIGHLIGHTS AND ACHIEVEMENTS

DATA COLLECTION

Data contained on the NCIS is provided by each coronial court in Australia and New Zealand. The NCIS Unit ensures the data received from the coronial courts is quality assured and nationally consistent.

Supplementary data is also provided by external organisations and updated annually including:

- ICD-10 coding provided by the Australian Bureau of Statistics and the New Zealand Ministry of Health. All deaths occurring in Australia and New Zealand are coded in accordance with the International Classification of Death – Tenth Revision (ICD-10) codes
- Work-related fatality supplementary data including occupation, industry and injury type is provided by Safe Work Australia. There is no equivalent for New Zealand data.

New supplementary dataset approved

Indigenous identification and country of birth are important variables on the NCIS. They allow approved system users to monitor and analyse death trends involving persons of various backgrounds. However, these variables are not consistently collected across the coronial system:

- Country of birth is listed as *Unlikely to be known* in approximately 36 per cent of closed case records on the NCIS
- Indigenous origin is listed as *Unlikely to be known* in around 25 per cent of records on the NCIS.

Recent studies have shown the benefit that data integration can have in improving the coverage of certain variables within data collections.

Data sourced from the Births, Deaths and Marriage registries (BDM data) was approved for integration into case records on the NCIS to help strengthen national completeness of indigenous status and country of birth data on 28 March 2018. This initiative helps to maximise the information available on the NCIS about deceased persons whose death has been reported to a coroner.

An increase in the completeness of data about indigenous identification and birthplace on the NCIS will allow users to obtain a more representative picture of the prevalence and type of fatalities that involve people from various backgrounds.

The BDM data will be integrated into the NCIS during 2019-20.

QUALITY ASSURANCE

Codeset upgrade

In September 2018, the NCIS Unit introduced a new codeset which contained an extensive listing of drugs that can be coded in the NCIS. The *Pharmaceutical substance for human use* (*PSHU*) codeset focused on simplifying the coding and searching for cases where pharmaceutical substances (alcohol or drugs) contributed to a death. The codeset was implemented into the NCIS interface, and where applicable into the local case management system maintained by the NCIS Unit.

From a coding perspective the change affects the way alcohol/drugs contribution to a death is coded. The codeset did not alter current NCIS coding guidance as to what and when alcohol or drugs should be coded. The codeset is stored separately to the NCIS Data Dictionary to allow for easier maintenance and revision.

Find out more about the Pharmaceutical substance for human use codeset and the project in the NCIS Coding tips newsletter September 2018

NCIS DATA USAGE

In 2018-19, the NCIS Unit continued in our mission to *provide comprehensive coronial data to those who need it* by preparing a range of reports for death investigators, researchers, government organisations, the media and community groups to support death prevention activities.

The NCIS Unit produced a total of 53 data reports at the request of coroners, death investigators and external parties (32 to coroners and death investigators, and 21 to external parties). The reports are used as evidence to inform public discussion and decision making.

NCIS Research agenda 2018-21

The first NCIS Research agenda was developed to outline the NCIS Unit's research and reporting priorities, activities and outcomes for the 2018-21 calendar years. The agenda identifies areas that will contribute to the assessment of mortality trends in coronial data through three key activity streams: reporting services, publications and tools.

View the NCIS Research agenda 2018-21

NCIS coronial data report service

There were 32 coronial reports delivered in 2018-19. Over one fifth (22%, n=7) of these reports examined drug and alcohol-related deaths, and 18.8 per cent (n=6) examined intentional self-harm. There were five reports concerning water-related and drowning deaths, and a further

four reports on administrative or operational statistics relating to the number of deaths reported, cases closed and document attachment rates.

One of these reports, *CR19-14 Drug-related deaths associated with music festivals in Australia 2000-2019*, was used to provide evidence at a joint inquest into six deaths of music festival patrons held by the New South Wales State Coroner's Court.

The largest proportion of coronial report requests were made by New South Wales (40.6%, n=13), followed by Queensland (28.1%, n=9).

A key feature within NCIS functionality is the capability for full text, keyword searching of descriptions about the fatal incident and medical and legal findings. This allows detailed searching for particular locations, drug types or environmental conditions that are not possible via other mortality data collections. Coroners can then use this information for comparison and trend analysis purposes.

A full list of NCIS data reports provided to coroners is included in Appendix A - NCIS Coronial reports

NCIS data report service for external parties

Data reports can be used as supporting evidence for external parties with an interest in death and injury prevention and can provide vital information regarding community safety. All information provided is non-identifying.

There were 21 data reports delivered in 2018-19. There were eight reports which provided data on drug and alcohol-related deaths, while seven reported on intentional self-harm deaths. Three reports were delivered concerning fire fatalities, while two detailed assault deaths.

Over half of these data reports (n=12) were requested by government, regulatory or statutory agencies.

A full list of NCIS data to external parties is provided in Appendix B - NCIS Data reports

NCIS Facts sheets

NCIS fact sheets are a unique NCIS product, free and publicly available via the NCIS website. They include statistical information on deaths reported to a coroner and cover specific topics of public interest. They aim to raise awareness of mortality risks and to inform death and injury prevention strategies.

All NCIS publications require coronial approval before they can be released.

The NCIS Unit released the Intentional self-harm among older persons in Australia fact sheet in May 2019. The fact sheet examined all closed case intentional self-harm deaths of persons aged 65 years or over reported to an Australian coroner between 1 January 2001 and 31 December 2016.

NCIS data for external research publications

The NCIS database is available for direct access by researchers with ethically approved research projects. There were 91 active projects utilising NCIS data as at 30 June 2019. Many of these research projects result in professional and peer reviewed publications which are often cited by media outlets which subsequently inform public discussion.

There were 46 research publications and reports that utilised NCIS data published during 2018-19. The research covered a range of topics including deaths in aged care, traffic-related deaths and drug related fatalities.

A full list of publications is provided in Appendix C – Research publications

COMMONWEALTH REPORTING REQUIREMENTS

The NCIS Unit delivered three mortality reports to the Australian Department of Health, a requirement of the partnership agreement held between the Commonwealth of Australia and the NCIS Unit. These reports included:

- NCIS Injury mortality data report 2016
- NCIS Drug mortality data report 2016
- NCIS Intentional self-harm mortality data report 2016

Value adds implemented in 2018-19

In addition to the 2016 data reports, the NCIS Unit prepared three addendums relating to the NCIS Injury mortality data reports covering 2015, 2014 and 2013 data. The addendums included updates on burn-related deaths, and the addition of a fire-related deaths section.

The addendums were provided to ensure that recent reports clearly defined and adequately covered both burn-related and fire-related subsets of the injury death data, and that maximum utility could be derived from the dataset.

Burn-related and fire-related death data was included in the included in the 2016 data report.

The reports underwent a format change from those previously provided to make them consistent with recent NCIS rebranding. The change also aimed to make the reports more reader friendly but did not constitute a change to the data contained in the reports.

NCIS STRATEGIC AND BUSINESS PLANNING

NCIS Strategic Plan 2017-21

The NCIS Strategic Plan 2017-21 was developed and formally endorsed by the NCIS Board of Management in December 2017. The plan lists four strategic goals. All work items undertaken by the NCIS Unit serve to meet one or more of the strategic goals:

- Ensure efficient and comprehensive acquisition of data
- Ensure data quality is of the highest possible standard
- Provision of quality coronial data to stakeholders
- Assurance of system continuity and security

NCIS Business Plan 2018-19

The NCIS Unit continued to make progress against the goals outlined in the NCIS Strategic plan 201-21. Six key goals were identified in the 2018-19 business plan:

- Foster opportunities to increase data comprehensiveness from both coronial and noncoronial sources
- Continuous improvement of the NCIS codeset and quality assurance processes
- Ongoing support and training for external coding staff
- Ensure all communication and information provision performed by the NCIS is aligned with strategic goals
- Ensure NCIS systems meet industry security standards for information transfer and access
- Ensure capability for ongoing, sustainable support for jurisdictions with NCIS supported LCMS.

Significant system and data management activities undertaken throughout 2018-19 included increasing document attachment rates, gaining the appropriate approvals to integrate births, deaths and marriages data into the NCIS, releasing a major codeset and completing a full disaster recovery test.

Other achievements included developing the NCIS Research agenda and publication schedules, increasing internal website maintenance capabilities and a variety of professional training and development for staff to increase individual and team capabilities.

TEACHING, TRAINING AND SUPPORT

SUPPORT FOR CODERS

The NCIS Unit continued to provide support to coronial court staff responsible for entering the data that is transferred to the NCIS:

- NCIS online coder training modules are designed to assist staff in coronial offices with responsibilities for entering data into NCIS. There are nine training modules in total and each module is focused on a particular aspect of the NCIS data entry process. The modules can be viewed in sequence or as required from the public NCIS website
- Guidelines for coders include coding advice and tips, access to the NCIS Coding manual and Data dictionary and information about the new *Pharmaceutical substance for human use codeset*.

NCIS SEARCH TRAINING

The NCIS Unit has continued to increase the availability of database search training.

To ensure all users maximise the value of their access to the NCIS, all newly approved death investigators and third-party researchers are offered search training. This is conducted either in person or remotely via Zoom. Search guides are also available on our website.

STUDENT PLACEMENTS

NCIS placements are designed to introduce students to a professional workplace where the skills and knowledge gained through study can applied. These placements are considered learning opportunities for the next generation of professionals working in this space.

The NCIS Unit does not expect students to have expert knowledge of the NCIS or its workings. A program of work is designed for each individual student, and support is provided to students throughout their placement to help achieve assigned tasks.

The NCIS Unit aims to provide students with a positive and productive placement. In return, students are expected to participate in office life and complete assigned tasks.

The NCIS Unit hosted two student placements during 2018-19.

Quality placement

One Master of Health Information Management student from La Trobe University was hosted for a 24-day placement. Key outcomes included:

 Review of free text field data: This task involved reviewing the use of free text fields on the NCIS and identifying cases either where an existing code could have been used or where there was a potential for a new code to be added

- Identification of non-residents who died while on holiday or working/study visas: Identification of relevant cases for retrospective change to the years in country value
- **Case mapping review**: A targeted review of the mapping activities performed as part of the recent *Pharmaceutical substance for human use codeset* upgrade to verify that the mapping processes employed during the upgrade implementation (both manual an automated) were accurate and appropriate.

Research placement

One Master of Criminology student from the University of Melbourne was hosted for a 200-hour placement. Key outcomes included:

- Fact sheet: In 2015, the NCIS published a fact sheet regarding intentional self-harm deaths of emergency services personnel. Since its publication, this topic and the fact sheet have been the subject of continued media and community interest. As a result, preparing an update of this fact sheet was a priority research area for the NCIS. The updated fact sheet is scheduled for release on World Mental Health Day in October 2019
- **Fatal fact case summaries**: Contribution to developing case summaries for inclusion in the NCIS' Coronial recommendations: Fatal facts.

Student testimonial from Master of Criminology student:

From March to September, I undertook a 200-hour internship with the NCIS as part of my Master of Criminology program with the University of Melbourne.

While it is perhaps somewhat unusual to consider the coronial arm of the justice system in relation to criminology, I believe that there are a lot of overlapping and intertwined issues of interest. This internship allowed me to develop an understanding of the coronial division of the justice system, an area that I was not familiar with previously. It also allowed me to extend my criminological thinking and experience into areas I was previously unfamiliar with.

The main portion of my work with NCIS involved the production of a report and fact sheet examining intentional self-harm deaths of emergency services personnel in Australia. Undertaking this project gave me a good understanding of the various processes involved in research; how to plan the research, use the NCIS database, analyse data, prepare a report and produce a fact sheet for publication.

The research process was a very interesting and valuable learning experience for me, and I also appreciated the opportunity to produce research on an issue that is of particular interest within the public discourse. These outcomes contribute to a body of work that aims to prevent harm in the community. I also assisted with compiling summaries for the Fatal Facts search tool, which gave me a good understanding of coronial inquests and recommendations at a broader level than the more focused data I was examining for the fact sheet and report.

The internship experience was not without its challenges, as by nature coronial information can be confronting, and working with such information can be difficult at times. However, the NCIS team places a strong emphasis on staff wellbeing, and I felt very well supported throughout my internship knowing that I was part of a team that genuinely cared about my wellbeing. The NCIS team was also very welcoming and it was wonderful to be working with a team who not only care about the work they do, but also care about my learning and development through the internship. This internship has taught me a lot, and I have been able to expand my knowledge of the justice system significantly. I am confident that this internship has provided me with tangible experience and skills in research that will be valuable and transferable other roles in the future.

Staff training and professional development

Each member of the NCIS Unit participated in the professional development program throughout 2018-19. There was a key focus on developing project management, communications and stakeholder engagement professional skills. Activities that supported the growth in capabilities included the implementing the *Pharmaceutical substance for human use codeset*, developing a new NCIS Research agenda, reviewing engagement with the Western Australian Coronial Ethics Committee.

NCIS Workplace wellness program

The NCIS Workplace wellness program continued this year to ensure we are caring for our mental health in what can be an emotionally challenging work environment. Staff were offered up to four counselling sessions with a qualified psychologist. This initiative is in recognition of the often-confronting information staff are exposed to as part of managing a coronial data collection, the value of ongoing professional development for all staff and the benefits of positive wellbeing on staff and on workplace productivity.

OPERATIONAL REPORTING

DATA COLLECTION

Each year the total number of cases contained on the NCIS increases, subsequently growing the value of the data to death investigators and researchers. Over the last five years, the number of deaths reported to an Australian or New Zealand coroner has remained relatively constant.

There were 23,284 new cases added to the NCIS during 2018-19, bringing the total number of cases contained in the NCIS at 30 June 2019 to 391,930.

Table 1: Total number of cases contained on the NCIS by financial year

| Financial year | New cases | Total number of cases |
|----------------|-----------|-----------------------|
| 2000 - 2001 | 13,096 | 13,096 |
| 2001 - 2002 | 17,467 | 30,563 |
| 2002 - 2003 | 21,557 | 52,120 |
| 2003 - 2004 | 18,855 | 70,975 |
| 2004 - 2005 | 18,893 | 89,868 |
| 2005 - 2006 | 19,656 | 109,524 |
| 2006 - 2007 | 17,478 | 127,002 |
| 2007 - 2008 | 17,623 | 144,625 |
| 2008 - 2009 | 19,408 | 164,033 |
| 2009 - 2010 | 18,236 | 182,269 |
| 2010 - 2011 | 18,104 | 200,373 |
| 2011 - 2012 | 17,510 | 217,883 |
| 2012 - 2013 | 30,404 | 248,287 |
| 2013 - 2014 | 24,726 | 273,013 |
| 2014 - 2015 | 24,850 | 297,863 |
| 2015 - 2016 | 24,600 | 322,463 |
| 2016 - 2017 | 23,104 | 345,567 |
| 2017 - 2018 | 22,448 | 368,015 |
| 2018 - 2019 | 23,284 | 391,930 |

The following tables provide information on the number of closed cases by jurisdiction and case type in 2018-19, and the number of closed cases by jurisdiction over the last five financial years.

Table 2: Total number of closed cases on the NCIS by jurisdiction and case type during 2018-19

| Jurisdiction | Natural case | Non-natural case | Total closed cases |
|---------------------------------|--------------|------------------|--------------------|
| Australian Capital Territory | 140 | 146 | 286 |
| New South Wales | 3292 | 2441 | 5733 |
| Northern Territory | 153 | 182 | 335 |
| Queensland | 825 | 1699 | 2524 |
| South Australia | 1608 | 1092 | 2700 |
| Tasmania | 248 | 235 | 483 |
| Victoria | 1237 | 2045 | 3282 |
| Western Australia | 883 | 1413 | 2296 |
| New Zealand | 1944 | 1245 | 3189 |
| Total | 10,330 | 10,498 | 20,828 |

Table 3: Total number of cases closed on the NCIS by jurisdiction and financial year

| Jurisdiction | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|---------|---------|---------|---------|---------|
| Australian Capital Territory | 326 | 211 | 309 | 263 | 286 |
| New South Wales | 6262 | 4805 | 4453 | 4313 | 5733 |
| Northern Territory | 258 | 376 | 354 | 227 | 335 |
| Queensland | 2829 | 2589 | 2182 | 2329 | 2524 |
| South Australia | 2470 | 2173 | 1795 | 2801 | 2700 |
| Tasmania | 501 | 478 | 516 | 578 | 483 |
| Victoria | 3907 | 4016 | 9548 | 5525 | 3282 |
| Western Australia | 2055 | 2047 | 2437 | 2329 | 2296 |
| New Zealand | 3112 | 3190 | 2902 | 3009 | 3189 |
| Total | 21,720 | 19,885 | 24,406 | 21,374 | 20,828 |

View current cases closure and document attachment statistics

DATA ACCESS AND USAGE

Approved death investigators

Death investigators are individuals who directly assist with the investigation of deaths reported to a coroner. They include coroners, coronial clerks, forensic pathologists and police assisting the Coroner. Death investigators also include police from homicide squads and missing person units. Death investigators may utilise the NCIS in the investigation process to review circumstances and outcomes in similar cases occurring in any jurisdiction in Australia and New Zealand.

Table 4: Total number of NCIS searches conducted by death investigators by type and financial year

| Search type | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---------------------|---------|---------|---------|---------|---------|
| Query design | 1365 | 1227 | 1204 | 981 | 1196 |
| Coroners screen | 1234 | 959 | 276 | 953 | 682 |
| Find case screen | 21,154 | 27,154 | 17,298 | 9927 | 9995 |
| Total | 23,753 | 29,449 | 18,778 | 11,885 | 11,873 |

Approved third party research projects

Third party users include researchers, university departments, policy makers or government departments with a bona fide involvement in monitoring and preventing injury and death in the community. Ethical approval for research projects is required for access to the NCIS.

There were 91 active third party research projects utilising NCIS data as at 30 June 2019. Of these, 17 were new projects that commenced in the 2018-19 financial year. There were 22 projects completed and 23 renewed in the same period. There were 46 peer reviewed papers published by researchers accessing the NCIS.

Table 6: Total number of new and renewed third party applications for access to NCIS by financial year

| Projects | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------------|---------|---------|---------|---------|---------|
| New | 28 | 34 | 25 | 16 | 17 |
| Renewed | 8 | 18 | 12 | 16 | 23 |
| Completed | - | 21 | 13 | 23 | 22 |
| Active projects as at 30 June 2019 | 80 | 86 | 102 | 93 | 91 |

A full list of publications is provided in Appendix C – Research publications

NCIS searches by third party researchers

There were 88,599 searches of the NCIS conducted by third party researchers during 2018-19, a small decrease from the previous year.

Table 5: Total number of NCIS searches conducted by third party users by type and financial year

| Search type | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---------------------|---------|---------|---------|---------|---------|
| Query design | 3983 | 5530 | 7756 | 6524 | 7187 |
| Coroners screen | 813 | 482 | 419 | 913 | 653 |
| Find case screen | 90,954 | 100,049 | 91,665 | 90,294 | 80,759 |
| Total | 95,753 | 106,061 | 99,840 | 98,938 | 88,599 |

Approved data on-provision agencies

NCIS data may be on-provided under certain conditions. Organisations must apply to the NCIS to become a Providing agency for the on-provision of NCIS sourced data to external parties.

Providing agencies may be current approved third-party researchers for their own research or organisational purposes or may be applying as new agencies for the sole purpose of data on-provision. They must have assessment processes in place to ensure that NCIS sourced data remains secure, and will only be on-provided to receiving agencies for research or statistical purpose

| Projects | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------|---------|---------|---------|---------|---------|
| Data on- provision | 2 | 2 | 2 | 4 | 1 |

DATA REPORTING

The NCIS Unit provides de-identified statistical data reports at the request of external parties, including government, private and media organisations. In addition, data reports are provided to assist in death investigation at the request of coronial staff.

Throughout 2018-19, the NCIS Unit compiled 53 data reports for coroners and external parties, which represents a 51 per cent decrease from the previous year.

Table 7: Total number of data reports prepared by NCIS for external parties and death investigators by financial year

| Organisation | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---------------------|---------|---------|---------|---------|---------|
| Death investigators | 41 | 55 | 70 | 57 | 32 |

| Organisation | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------|---------|---------|---------|---------|---------|
| External parties | 44 | 32 | 43 | 43 | 19 |
| Media organisations | 5 | 6 | 8 | 4 | 2 |
| Total | 90 | 93 | 121 | 108 | 53 |

A full list of NCIS data reports provided to coroners is included in Appendix A - NCIS Coronial reports. A full list of NCIS data reports provided to external parties is included in Appendix B - NCIS Data reports

QUALITY ASSURANCE

The NCIS conducts a manual quality assurance program on all eligible cases. To be included in a quality review a case must meet at least one of the following criteria:

- Case type completion is non-natural death [Death due to external cause(s), Body not recovered or Unlikely to be known]
- Case type completion is Death due to natural cause(s) and
 - o at least one mechanism/object screen is coded
 - o Cause of death field contains one of the nominated keywords or
 - o Coroners recommendations/warning field is *Recommendations made/warning made*

The following tables provide detail about the QA activities conducted throughout 2018-19 and the results of these activities.

Table 8: Total number of cases quality assured by jurisdiction and financial year

| Jurisdiction | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---------------------------------|---------|---------|---------|---------|
| Australian Capital Territory | 398 | 347 | 366 | 122 |
| New South Wales | 2757 | 6099 | 4142 | 11,226 |
| Northern Territory | 378 | 427 | 473 | 201 |
| Queensland | 7815 | 3833 | 2951 | 1708 |
| South Australia | 3954 | 2109 | 2134 | 1145 |
| Tasmania | 557 | 520 | 678 | 306 |
| Victoria | 689 | 4477 | 11320 | 2531 |
| Western Australia | 1075 | 3386 | 2766 | 1468 |
| New Zealand | 2752 | 4039 | 6717 | 1708 |
| Total | 20,375 | 25,237 | 31,547 | 20,409 |

Table 9: Total number of closed cases awaiting QA review by jurisdiction and financial year

| Jurisdiction | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---------------------------------|---------|---------|---------|---------|
| Australian Capital Territory | 341 | 226 | 31 | 81 |
| New South Wales | 6012 | 2695 | 901 | 876 |
| Northern Territory | 492 | 293 | 35 | 55 |
| Queensland | 4281 | 1931 | 714 | 529 |
| South Australia | 2268 | 1014 | 435 | 352 |
| Tasmania | 603 | 395 | 115 | 88 |
| Victoria | 5194 | 5712 | 1511 | 1291 |
| Western Australia | 2895 | 1820 | 600 | 489 |
| New Zealand | 7373 | 5435 | 863 | 225 |
| Total | 30,059 | 19,521 | 5205 | 3986 |

In February 2016 the NCIS Unit revised its processes for the type of cases that are manually quality reviewed. This significantly impacted the numbers of cases that were awaiting quality review between 2015-16 and 2016-17 as seen in table 9.

The NCIS Unit moved from manually quality reviewing every case on the system to reviewing those cases that were most likely to be involved in monitoring, research and death prevention. Manual quality reviews are now undertaken on all external cause deaths, those with recommendations, or where an external factor contributed to the death. This has allowed these cases to be quality reviewed in a timelier manner and maximised the impact of the finite quality review resources within the NCIS Unit.

FINANCIAL REPORT

STATEMENT OF RECEIPTS AND EXPENDITURE YEAR ENDED 30 JUNE 2019

| | 2019 \$ | 2018 \$ |
|--|---------------|------------|
| Opening balance (cash in bank) | \$ 877,511 | 860,444 |
| • | 0//,511 | 000,444 |
| Add receipts | | |
| Income | 1.005.004 | 4.075.700 |
| Government grants – Australia (1) | 1,085,834 | 1,075,723 |
| Government grants – New Zealand (2) | 91,609 | 91,609 |
| User pays (3) | 188,317 | 209,717 |
| Total | 1,365,760 | 1,377,049 |
| Less expenses | | |
| Professional services | - | - |
| Contractors, consultants and professional service expenses (4) | 11,868 | 6,277 |
| Depreciation (5) | 35,810 | (14,407) |
| Employee related expenses (6) | 1,033,799 | 857,744 |
| Information technology expenses (7) | 370,679 | 316,230 |
| Other operating expenses | - | - |
| Postage and communication expenses | 716 | 247 |
| Printing, stationery and other office expenses | 1,923 | 2,871 |
| Staff training and development expenses (8) | 9,569 | 30,329 |
| Travel, entertainment and personal expenses | 4,826 | 4,724 |
| Utilities and services | 129,000 | 127,640 |
| Total | 1598,191 | 1,331,605 |
| Balance for the year | (232,431) | 45,444 |
| Capital expenditure | - | - |
| Accrued expenses and accounts payable (Net) | (22,737) | (4,757) |
| Accumulated depreciation (net of asset movements) | 35,810 | (33,953) |
| Grants pain in advance | - | - |
| Accrued revenue | - | - |
| Accounts receivable | 11,262 | (39,914) |
| Movement in employee provisions (9) | 59,498 | (29,581) |
| Closing balance (cash in bank) | 706,389 | 877,511 |

EXPLANATORY NOTES FOR STATEMENT OF RECEIPTS AND EXPENDITURE

- 1. Refer to the next section *Government funding contributions* for more details
- 2. Refer to the next section Government funding contributions for more details
- 3. User pays income includes annual fees from third party researchers and fees from data requests. The number of active third-party research projects remained stable compared to the previous year, however there was a 51 per cent decrease in the number of data reports issued in 2017-18 compared to 2017-18
- 4. Professional psychology services were engaged as part of a staff wellbeing program
- 5. Depreciation costs in 2017-18 were considerably lower than expected due to an asset being raised in error during 2016-17 and the subsequently disposed in 2017-18. Depreciation expense returned to expected levels in 2018-19
- 6. Employee related expenses increased from 2017-18 when costs were significantly less than forecast due to a number of staff vacancies throughout the year
- 7. Information technology expenditure include annuals charges to the NCIS' IT service provider and expenditure required for servers and various licences
- 8. Staff training and development expenses were on budget in 2018-19. There was a decrease of \$20,760 from 2017-18 which saw significant expenditure invested during that year in the ANZSOG Strategic Leadership Program, Writing for Government and Facilitation training
- 9. Provisions for employee benefits or entitlements consist of amounts for annual leave and long service leave accrued by employees. Provisions are recognised when the NCIS Unit has a present obligation, the future sacrifice of economic benefits is probable, and the amount of the provision can be measured reliably. The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at reporting period, taking into account the risks and uncertainties surrounding the obligation. There was no significant leave taken throughout the year.

GOVERNMENT FUNDING CONTRIBUTIONS

The following contributions were contributed by governments this financial year:

| Jurisdiction | Agency | Amount contributed \$AU (GST exclusive) |
|-----------------|--|--|
| Commonwealth of | Australian Department of Health | 400,000 |
| Australia | Australian Institute of Criminology | 24,819 |
| | Australian Competition and Consumer Commission | 18,614 |
| | Department of Infrastructure, Regional Development and Cities | 26,000 |
| | SafeWork Australia | 95,455 |
| | Sub-total | 564,888 |

| Jurisdiction | Agency | Amount contributed \$AU (GST exclusive) |
|-----------------------|------------------------------|--|
| Australian states and | Australian Capital Territory | 8348 |
| territories | New South Wales | 165,008 |
| | Northern Territory | 5382 |
| | Queensland | 106,991 |
| | South Australia | 38,649 |
| | Tasmania | 12,540 |
| | Victoria | 133,000 |
| | Western Australia | 51,028 |
| | Sub-total | 520,946 |
| New Zealand | New Zealand | 91,609 |
| Total | | 1,177,443 |

APPENDIX A - NCIS CORONIAL REPORTS

The following coronial reports were prepared by and issued by the NCIS Unit during this financial year:

Australian Capital Territory

| Reference | Title | Client | Issued |
|-----------|--|---|--------------|
| CR18-29 | Fatalities involving individuals receiving in-patient treatments in Australia, 2000-2018 | Coroner's Court of the Australian Capital Territory | Jul-Sep 2018 |
| CR18-34 | Drug-related fatalities in the ACT 2014 - 2018 | Coroner's Court of the Australian Capital Territory | Oct-Dec 2018 |

New South Wales

| Reference | Title | Client | Issued |
|-----------|--|---|--------------|
| CR18-16 | Alcohol-related fatalities with inquests in Australia, 2008-2018 | Coroners Court of New South Wales | Jul-Sep 2018 |
| CR18-30 | Fall-related intentional self-harm fatalities involving police in Australia, 2014 - 2018 | New South Wales Crown Solicitor's Office | Jul-Sep 2018 |
| CR18-30.1 | Fall-related intentional self-harm fatalities involving police in Australia, 2010 - 2013 | New South Wales Crown Solicitor's Office | Jul-Sep 2018 |
| CR18-31 | Intentional self-harm fatalities in NSW, 2016 - 2017 | Coroners Court of New South Wales | Jul-Sep 2018 |
| CR18-32 | Free diving-related fatalities in Australia, 2000 - 2018 | Coroners Court of New South Wales | Jul-Sep 2018 |
| CR18-35 | Intentional self-harm fatalities involving workplace stress and bullying in Australia, 2000 - 2018 | Coroners Court of New South Wales | Jan-Mar 2019 |
| CR19-02 | Cases closed by a New South Wales coroner in 2018 | Coroners Court of New South Wales | Jan-Mar 2019 |
| CR19-08 | NSW State Coroner's Court cases, October 2018 - March 2019 | Coroners Court of New South Wales | Apr-Jun 2019 |
| CR19-11 | Drug-related deaths in New South Wales, 2015 - 2018 | Coroners Court of New South Wales | Apr-Jun 2019 |
| CR19-12 | Natural cause deaths reported to a coroner in New South Wales, 2010 - 2018 | Coroners Court of New South Wales | Apr-Jun 2019 |
| CR19-13 | NCIS access by NSW organisations, FY 2017-18 | New South Wales Department of Justice | Apr-Jun 2019 |

| Reference | Title | Client | Issued |
|-----------|---|--|--------------|
| CR19-14 | Drug-related deaths associated with music festivals in Australia, 2000 - 2019 | New South Wales Department of Justice | Apr-Jun 2019 |
| CR19-16 | Caffeine-related deaths in Australia, 2000 - 2019 | Coroners Court of New South Wales | Apr-Jun 2019 |

Northern Territory

There were no reports issued to the Northern Territory in this financial year.

Queensland

| Reference | Title | Client | Issued |
|-----------|---|---------------------------------|--------------|
| CR18-17 | Deaths at Josephine Falls, 2001 - 2018 | Coroners Court of Queensland | Jul-Sep 2018 |
| CR18-18 | Deaths of Forensic Disability Service Residents in Brisbane, 2011 - 2018 | Coroners Court of Queensland | Jul-Sep 2018 |
| CR18-19 | Fatalities involving drug toxicity in Children under 5 years in Aus, 2000- 2018 | Coroners Court of Queensland | Jul-Sep 2018 |
| CR18-26 | Drowning-related fatalities of children under 10 years involving non- permanent pools in Australia, 2000- 2018 | Coroners Court of Queensland | Jul-Sep 2018 |
| CR18-27 | Fatalities involving tree-felling (incl. bystanders) in Australia, 2008-2018 | Coroners Court of Queensland | Jul-Sep 2018 |
| CR19-01 | Deaths at sea of commercial fishing vessel occupants, 2014 - 2019 | Coroners Court of Queensland | Jan-Mar 2019 |
| CR19-06 | Industrial work-related fatalities in Queensland, 2016 - 2019 | Coroners Court of Queensland | Jan-Mar 2019 |
| CR19-07 | Intentional self-harm deaths of person with a history of Champix use, 2001 - 2019 | Coroners Court of Queensland | Apr-Jun 2019 |
| CR19-15 | Fentanyl-related deaths in Australia, 2014 - 2018 | Coroners Court of Queensland | Apr-Jun 2019 |

South Australia

| Reference | Title | Client | Issued |
|-----------|--|---------------------------------------|--------------|
| CR18-20 | Fatalities involving positional asphyxia in AUS, 2000-2015 | Coroner's Court of South Australia | Jul-Sep 2018 |
| CR18-21 | Fatalities involving 'privilege of self- incrimination' in AUS, 2000-2015 | Coroner's Court of South Australia | Jul-Sep 2018 |
| CR19-05 | Child drowning deaths at childcare facilities in Australia, 2006 - 2019 | Coroner's Court of South Australia | Jan-Mar 2019 |

Tasmania

There were no reports issued to Tasmania in this financial year.

Victoria

| Reference | Title | Client | Issued |
|-----------|---|---|--------------|
| CR18-33 | Cases closed by a Victorian Coroner in 2007 | Coroners Court of Victoria | Oct-Dec 2018 |
| CR19-09 | Deaths of swimmers at beaches in Australia, 2014 - 2019 | Coroners Court of Victoria (Coroners Prevention Unit) | Apr-Jun 2019 |
| CR19-10 | Deaths involving entrapment in vehicle windows, 2000 - 2019 | Coroners Court of Victoria (Coroners Prevention Unit) | Apr-Jun 2019 |

Western Australia

| Reference | Title | Client | Issued |
|-----------|--|---|--------------|
| CR18-23 | Intentional self-harm fatalities involving shot guns in Australia, 2000-2018 | Coroner's Court of Western Australia | Jul-Sep 2018 |
| CR19-03 | Motor-sporting deaths of children in Australia, 2001 - 2019 | Coroner's Court of Western Australia | Jan-Mar 2019 |

New Zealand

There were no reports issued to New Zealand in this financial year.

APPENDIX B - NCIS DATA REPORTS

External parties

The following data reports were prepared by the NCIS Unit and issued with coronial approval to external parties (excluding media outlets) during this financial year:

| Reference | Title | Client | Issued |
|-----------|--|---|--------------|
| DR18-28 | Drug toxicity fatalities in Western Sydney, 2008 - 2015 | Western Sydney University | Jul-Sep 2018 |
| DR18-24 | Opioid-related fatalities in Australia, 2000-2015 | University of Western Australia | Jul-Sep 2018 |
| DR18-39 | Intentional self-harm fatalities resulting from jumps/falls from non-residential buildings in Australia, 2010 - 2016 | Australian Building Codes Board | Oct-Dec 2018 |
| DR18-47 | Pregabalin and gabapentin-related fatalities in Australia, 2000 - 2016 | Therapeutic Goods Administration | Oct-Dec 2018 |
| DR18-54 | Work-related fatalities involving mobile cranes in Australia and New Zealand, 2000 - 2016 | Write Strategy Marketing Group/Lifting Matters | Oct-Dec 2018 |
| DR18-49 | Opioid-related fatalities in Australia, 2000 - 2016 | University of Western Australia | Oct-Dec 2018 |
| DR18-52 | Intentional self-harm and assault fatalities in Australia, 2005 - 2016 | Department of Justice and Regulation (Vic) | Oct-Dec 2018 |
| DR18-55 | Intentional self-harm, natural disaster, drowning and fire-related fatalities in Greater Melbourne, 2015 - 2016 | City of Melbourne | Jan-Mar 2019 |
| DR18-44 | Deaths reported to a coroner in Australia and contained on the NCIS, 2001 - 2016 | Department of Justice and Community Safety (Vic) | Jan-Mar 2019 |
| DR18-25 | Alcohol-related deaths in Queensland, 2005 - 2018 | Deakin University | Jan-Mar 2019 |
| DR19-01 | Venomous animal-related fatalities in Australia, 2000 - 2016 | Australian Government Department of Health | Jan-Mar 2019 |
| DR19-06 | Intentional self-harm deaths in specified geographical areas compared to Australian totals, 2000 - 2016 | Every Life Matters | Jan-Mar 2019 |
| DR19-08 | Deaths due to fires caused by cigarettes in Australia, 2002 - 2016 | Australian Competition and Consumer Commission | Jan-Mar 2019 |
| DR19-03 | Intentional self-harm deaths of emergency services personnel in Australia and New Zealand, 2007 - 2016 | Edith Cowan University | Jan-Mar 2019 |

| Reference | Title | Client | Issued |
|-----------|--|---|--------------|
| DR19-16 | Fire-related deaths in residential buildings in Australia, 2001 - 2016 | Australian Building Codes Board | Apr-Jun 2019 |
| DR19-21.1 | Vehicle maintenance deaths involving the use of vehicle supports, 2000 - 2016 | Australian Competition and Consumer Commission | Apr-Jun 2019 |
| DR19-24 | Single punch assault deaths in Australia, 2013 - 2016 | Victorian Institute of Forensic Medicine | Apr-Jun 2019 |
| DR19-27 | Intentional self-harm, drug and alcohol- related deaths in Queensland, 2013 - 2017 | Cairns and Hinterland Hospital and Health Service | Apr-Jun 2019 |
| DR19-33 | Amphetamine-related deaths in New South Wales, 2014 - 2018 | Special Commission of Inquiry into the Drug 'Ice' | Apr-Jun 2019 |

Media outlets

The following data reports were prepared by the NCIS Unit and issued with coronial approval to media outlets during this financial year:

| Reference | Title | Client | Issued |
|-----------|---|-----------------------------------|--------------|
| DR18-27 | Intentional self-harm fatalities of taxi industry workers in Australia, 2005 - 2015 | Background Briefing, ABC Radio | Jul-Sep 2018 |
| DR18-32 | Fentanyl-related fatalities in Australia, 2010-2015 | 60 Minutes, Channel 9 | Jul-Sep 2018 |

APPENDIX C - RESEARCH PUBLICATIONS

The NCIS provides data to experts who investigate mortality and develop death and injury prevention strategies. Annual reports using NCIS data include:

- Causes of death Australian Bureau of Statistics
- Deaths in custody Australian Institute of Criminology
- Work-related fatalities Safe Work Australia
- Homicide in Australia Australian Institute of Criminology
- National coastal safety Surf Life Saving Australia
- NSW child deaths NSW Ombudsman

Access to NCIS data is available for ethically approved research projects. The following research publications and reports using NCIS data were released during this financial year:

Aged care

| Publication citation | Publication date |
|--|------------------|
| Variations in death notification of nursing home residents to Australian Coroners Ibrahim, J. E., Kipsaina, C., Martin, C., Randon, D. L. & Bugeja, L. <i>Injury</i> Prevention | July 2018 |
| Deaths due to thermal injury from cigarette smoking in a 13-year national cohort of nursing home residents Holmes, A. L., Bugeja, L., Young, C. & Ibrahim, J. E. <i>International Journal of Older People Nursing</i> | March 2019 |

Coronial systems

| Publication citation | Publication date |
|--|------------------|
| Turnaround time data for coronial autopsies – time to complete forensic post-mortem examination reports and influencing factors for Australia and New Zealand in 2015 and 2010 Langlois, N. E. I., Sully, C. J. & Edwards, S. Forensic Science, <i>Medicine and Pathology</i> | January 2019 |
| The National Coronial Information System: saving lives through the power of data Dunstan, L. <i>The Australian Economic Review</i> | June 2019 |

Custody

| Publication citation | Publication date |
|--|------------------|
| National Deaths in Custody Program: Deaths in custody in Australia 2016– | February 2019 |
| Gannoni, A. & Bricknell, S. Australian Institute of Criminology | |

| Publication citation | Publication date |
|--|------------------|
| National Deaths in Custody Program: Deaths in custody in Australia 2015– 16 Gannoni, A. & Bricknell, S. <i>Australian Institute of Criminology</i> | February 2019 |
| Indigenous deaths in custody: 25 years since the Royal Commission into Aboriginal Deaths in Custody Gannoni, A. & Bricknell, S. Australian Institute of Criminology | February 2019 |
| The Prison and Transition Health (PATH) Cohort Study: Study Protocol and Baseline Characteristics of a Cohort of Men with a History of Injecting Drug Use Leaving Prison in Australia Kirwan, A., Curtis, M., Dietze, P., Aitiken, C., Woods, E., Walker, S., Kinner, S., Ogloff, J., Butler, T. & Stoove. M. <i>Journal of Urban Health</i> | April 2019 |
| Deaths in custody in Australia: a quantitative analysis of coroners' reports Walshe, T. & Counter, A. Current Issues in Criminal Justice | May 2019 |

Drowning and water

| Publication citation | Publication date |
|---|------------------|
| National Coastal Safety Report 2018 Surf Life Saving Australia | September 2018 |
| Coast Safe Report 2018 Surf Life Saving Queensland | September 2018 |
| An overview of fatal, unintentional drowning in publicly accessible swimming pools in Australia Mahony, A., Peden, A. E. & Roberts, C. <i>Injury Prevention</i> | November 2018 |
| Understanding lapses in supervision of children 0–4 years who drowned in Australia Peden, A. E. & Franklin, R. C. <i>Injury Prevention</i> | November 2018 |
| Unintentional bathtub drowning deaths among those aged 65 years and older in Australia Peden, A. E., Franklin, R. C., Pearn, J. H. & Mahony, A. J. International Journal of Aquatic Research and Education | March 2019 |

Drugs and alcohol

| Publication citation | Publication date |
|---|------------------|
| Opioid-, amphetamine-, and cocaine-induced deaths in Australia: August 2018 Roxburgh, A., Dobbins, T., Degenhardt, L. & Peacock, A. <i>National Drug and Alcohol Research Centre</i> | August 2018 |
| Rising pregabalin use and misuse in Australia: trends in utilization and intentional poisonings Cairns, R., Schaffer, A. L., Ryan, N., Pearson S. & Buckley N. A. <i>Addiction</i> | August 2018 |
| An analysis of issues in the classification and reporting of heroin-related deaths | November 2018 |

| Publication citation | Publication date |
|--|------------------|
| Stam, N. C., Gerostamoulos, D., Pilgrim, J. I., Smith, K., Moran, L., Parsons, S. & Drummer, O. H. <i>Addiction</i> | |
| Challenges with take-home naloxone in reducing heroin mortality: a review of fatal heroin overdose cases in Victoria, Australia Stam, N. C., Gerostamoulos, D., Smith, K., Pilgrim, J. I. & Drummer, O. H. Clinical Toxicology Toxicology | November 2018 |
| Interpreting alcohol concentrations in toxicology reporting: under the influence or post-mortem artefacts? Chong, D., Chitty, K., & Buckley, N. Presented to Asia Pacific Association of Medical Toxicology Congress: Denpasar, Indonesia (November 2018) | November 2018 |
| Deaths by poisoning in New Zealand, 2008–2013 Fountain, J. S., Reith, D. M., Tomlin, A. M. Smith, A. J. & Tilyard, M. W. Clinical Toxicology | February 2019 |
| Alcohol and other drug use in regional and remote Australia: consumption, harms and access to treatment, 2016-17 Australian Institute of Health and Welfare | March 2019 |
| Psychostimulant use and fatal stroke in young adults Darke, S., Duflou, J., Kaye, S., Farrell, M., & Lappin, J. Journal of Forensic Sciences | April 2019 |
| Coronial findings pertaining to non-opioid and non-benzodiazepine drug- related deaths in Australia Phillips, H., Nauton, M., Jackson, S. L., Kosari, S. & Peterson, G. M. <i>Journal</i> of Pharmacy Practice and Research | May 2019 |
| The relative lethal toxicity of pharmaceutical and illicit substances; A 16- year study of the Greater Newcastle Hunter Area, Australia Brett, J., Wylie, C. E., Raubenheime, J., Isbister, G. K. & Buckley, N. A. <i>British</i> <i>Journal of Clinical Pharmacology</i> | June 2019 |

Farm and workplace

| Publication citation | Publication date |
|--|------------------|
| Large agricultural vehicles on roads in Australia Franklin, R. C., King, J. C. & Miller, L. <i>National Farmers' Federation</i> | August 2018 |
| ATVs and agriculture: A review of the literature Neves, H., Brazile, W. & Gilkey, D. P. ACTA Scientific Agriculture | September 2018 |
| Work-related traumatic injury fatalities Australia 2017 Safe Work Australia | December 2018 |
| Identifying opportunities to prevent work-related fatal injury in New Zealand using 40 years of coronial records: protocol for a retrospective case review study Lilley R., McNoe, B., David, G., Horsburg, S., Maclennan, B. & Driscoll, T. Injury Epidemiology | May 2019 |

Health and medical

| Publication citation | Publication date |
|---|------------------|
| Fatal stroke in pregnancy and the puerperium Lappin, J. M., Darke, S., Duflou, J., Kaye, S. & Farrell, M. <i>Stroke</i> | November 2018 |
| Body mass index and fatal stroke in young adults: a national study Darke, S., Duflou, J., Kaye, S., Farrell, M., & Lappin, J. <i>Journal of Forensic and Legal Medicine</i> | April 2019 |

Sport

| Publication citation | Publication date |
|--|------------------|
| A walk in the park? A deep dive into tramping incidents in New Zealand | July 2018 |
| New Zealand Mountain Safety Council | |

Suicide

| Publication citation | Publication date |
|--|------------------|
| Men's work, women's work and suicide: a retrospective mortality study in Australia Milner, A. & King, T. Australian and New Zealand Journal of Public Health | December 2018 |
| Data-informed targets for suicide prevention: a small-area analysis of high-risk suicide regions in Australia Torok, M. Shand, F., Phillips, M., Meteoro, N., Martin, D. & Larsen, M. Social Psychiatry and Psychiatric Epidemiology | April 2019 |

Transport

| Publication citation | Publication date |
|---|------------------|
| Fatal cyclist crashes in Australia O'Hern, S. & Oxley, J. <i>Traffic Injury Prevention</i> | October 2018 |
| Are highway constructions associated with increased transport incidents? A case study of NSW Pacific Highway construction zones 2011-16 Sarrami, P., Hall, B., Lemin, P., Dinh, M., Lassen, C., Balogh, Z., McDougall, D., Wullschleger, M. & Dale, K. Presented to 2018 Australasian Road Safety Conference: Sydney, Australia | October 2018 |
| Mobility scooter-related injuries and deaths McKenna K, Tovell A & Pointer S. <i>Australian Institute of Health and Welfare</i> | May 2019 |

Trauma

| Publication citation | Publication date |
|---|------------------|
| Prehospital trauma death review in the State of Victoria, Australia: a study protocol Mercier, E., Cameron, P. A., Smith, K. & Beck B. <i>BMJ Open</i> | July 2018 |
| An anthropological examination of the types of skeletal fractures resulting from fatal high (> 3 m) free falls | August 2018 |

| Publication citation | Publication date |
|---|------------------|
| Rowbotham, S.K., Blau, S., Hislop-Jambrich, J., & Francis, V. <i>Journal of Forensic Sciences</i> | |
| PTSD in emergency service workers: When rescuers need rescuing Cooper, J., Phelps, A. & Harvey, S. B. <i>Medicine Today</i> | September 2018 |
| A 100 year review of the evolution in neurosurgical thinking regarding compound depressed skull fractures Adrian Kelly and Patrick Lekgwara | September 2018 |
| Applying a developmental lens to examine injury mortality in young people in Australia, 2001-2013 Seah, R. & Mitchell, R. J. Health Promotion Journal of Australia | October 2018 |
| Reviewing prehospital trauma deaths Beck, B., Smith, K., Mercier, E. & Cameron, P. <i>Injury Prevention</i> | November 2018 |
| Parent Representations in Filicide: An Interactionist Analysis Sim, J. L-S. SSRN | November 2018 |
| Electrical injuries: hospitalisations and deaths, 2014-15 and 2015-16 Trovell, A., McKenna, K. & Harrison, J. E. <i>Australian Institute of Health and Welfare</i> , Cat. no: INJCAT 197 | November 2018 |
| An epidemiological analysis of prehospital fatal injuries in New Zealand: identifying opportunities for prevention Lilley, R., Kool, B., de Graaf, B., David, G., Ameratunga, S., Reid, P., Civil, I., Dicker, B. & Branas, C. <i>Injury Prevention</i> | November 2018 |
| Differences in the epidemiology of out-of-hospital and in-hospital trauma deaths Beck, B., Smith, K., Mercier, E., Gabbe, B., Bassed, R., Mitra, B., Teague, W., Siedenburg, J., McLellan, S. & Cameron, P. <i>PLoS ONE</i> | June 2019 |

A full list of publications and reports using NCIS is available on our website