Forensic mental health: DownUnder

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Introduction and Disclaimer

- Tony Abbott 2008 "*No-one, however smart, however well educated…is the suppository of all wisdom…..*"

Outline of presentation

- Mental Health Services in Australia and Forensic MHS
- Australian Aboriginal Persons and the health and criminal justice systems
- Gun Law reform in Australia and gun violence data

Australia

- 24.9 million people
  - Increasing approx. 1.6% per year with migration accounting for >2/3rds growth
- 1 in 4 Australians born overseas
  - Migration boom especially post WW2 cf 1901 Immigration Restriction Act
- Indigenous Australians approx. 2.4% total population
- High social mobility
  - Parental earnings do not predict children's
  - Similarly educational attainment not predicted by parental education
- 6 States, Two Territories
  - Mark Twain changing trains in Australia in 1895
- Federal Leverage
  - Funding for cooperation, Tax revenue spending
  - COAG and Aus Health Ministers Council

(OECD 2008 *Growing Unequal)*

Australian Government Budget and Spending

- 90 +% Australian budget from taxes
  - 50% of this from personal income tax
- Spent on Social Security and Welfare (35% expenditure) Education and Health (Fed Govt to State Govt) approx. 25% each
- CF other OECD member states
  - Lower level of taxes as % of total GDP (similar to US)
  - Aus relatively low spending on cash benefits (eg pensions/unemployment)
    - Highly targeted to the most disadvantaged and tax burden lesser on low income persons/families

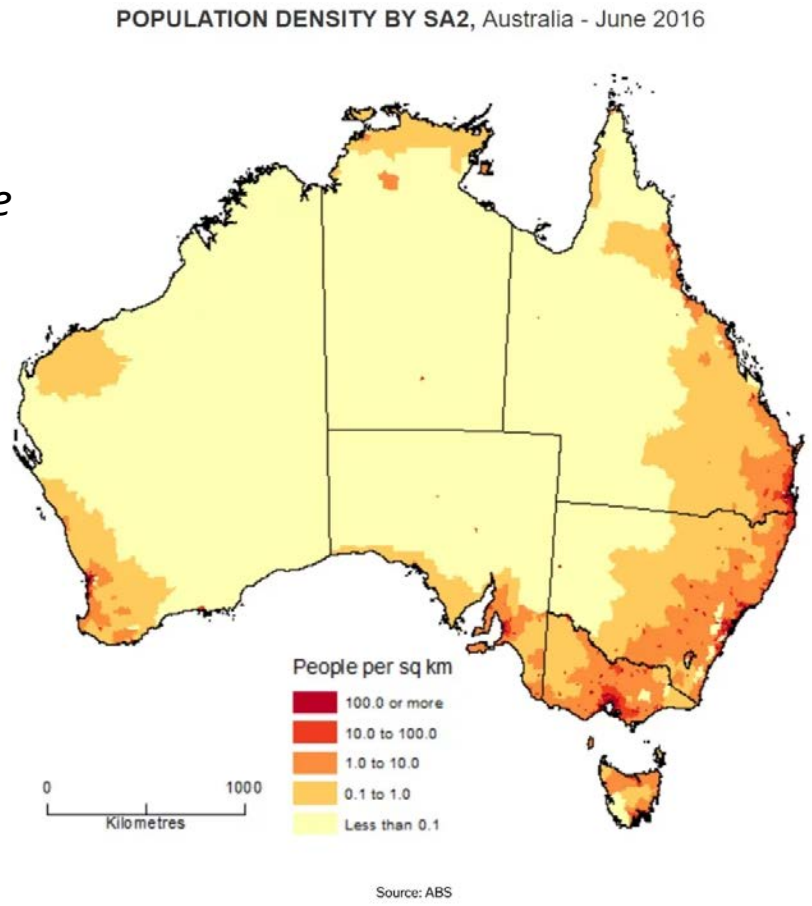
City/Inner Regional areas and Rural/Remote Divide

AIHW Report Card: *Australia's Health 2016, Chapter 5 – Rural and Remote Health*

In Rural and Remote Australia

- Less access to/use of health care (especially specialist incl. MH)
- Lower education and higher unhealthy lifestyle factors
- Higher occupational risks (trauma related morbidity/mortality)
- Reduced life expectancy

- Consider the transport of the acutely mentally ill agitated person from the remote outback.



The Australian Health Care System(s)

- *Australia's health system is a multifaceted web of public and private providers, settings, participants and supporting mechanisms (AIHW)*
- Estimated total cost per year 155 Billion (145 Recurrent)
  - 38% Primary health care
  - 40% Hospital care
- 2015 Primary Health Networks
  - Incl grants for Primary Mental Health
- Medibank, Medicare and Private Cover
  - 1974 Medibank – universal health cover (HIC)
  - 1983 Medicare (MBS)
  - Carrot and stick reforms
    - Levy, MLS, Pvt insurance rebate, LHC penalties
  - Approx 50% Australians have private cover
- Limited impact and scope of private MH care
  - *Eg. 9% of total Australian clinicians and 22% beds*

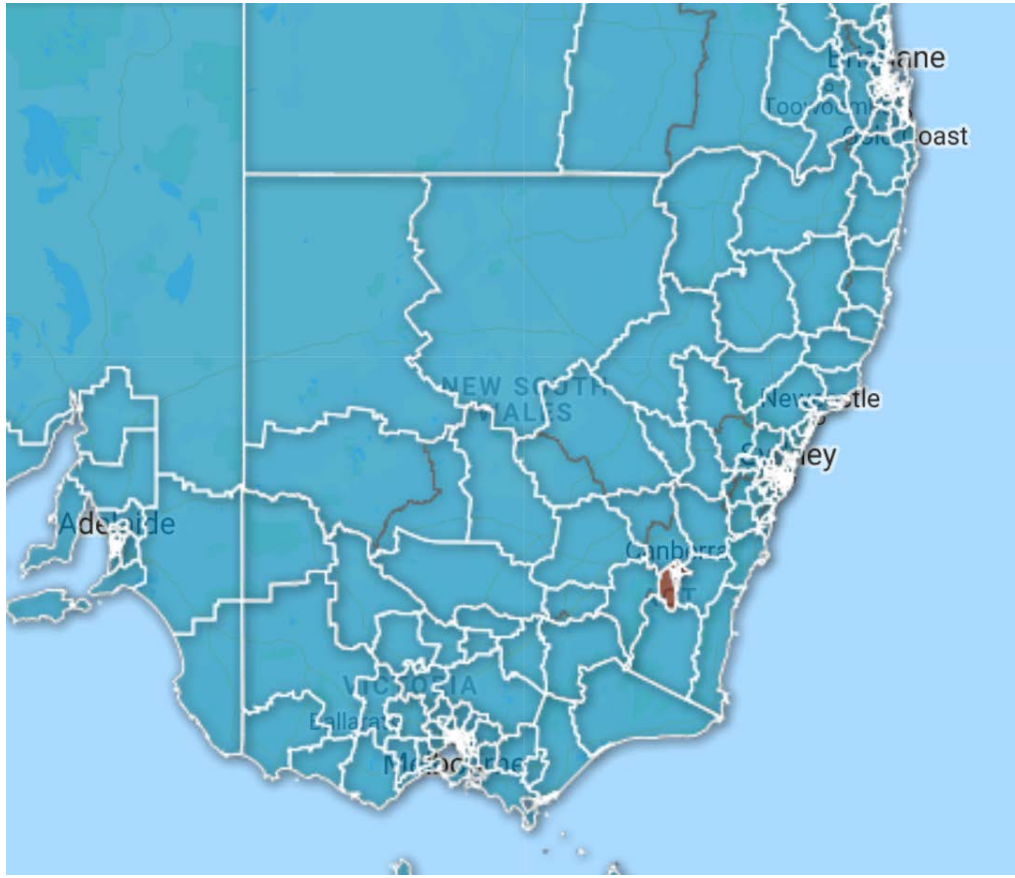


Figure 2.1.1: Main roles of government in Australia's health system

Australian Government

- sets national policies
- is responsible for Medicare (including subsidising medical services and joint funding, with states and territories, of public hospital services)
- funds pharmaceuticals through the Pharmaceuticals Benefits Scheme
- funds community-controlled Aboriginal and Torres Strait Islander primary health care
- supports access to private health insurance
- regulates private health insurance
- organises health services for veterans
- is a major funder of health and medical research, including through the National Health and Medical Research Council
- regulates medicines, devices and blood

State and territory governments

- manage public hospitals
- license private hospitals
- are responsible for public community-based and primary health services (including mental health, dental health, alcohol and drug services)
- deliver preventive services such as cancer screening and immunisation programs
- are responsible for ambulance services
- are responsible for handling health complaints

Local governments

- provide environmental health-related services (for example, waste disposal, water fluoridation, water supply, food safety monitoring)
- deliver some community- and home-based health and support services
- deliver some public health and health promotion activities

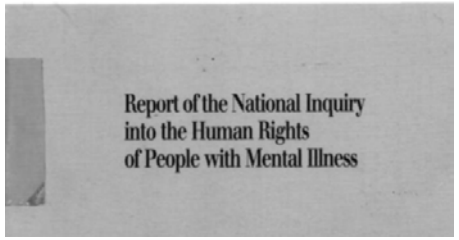
Shared

- regulation of health workforce
- education and training of health professionals
- regulation of pharmaceuticals and pharmacies
- support improvements in safety and quality of health care
- funding of public health programs and services
- funding of Aboriginal and Torres Strait Islander health services

Sources: Biggs 2013; COAG 2012; Department of Health 2015b; Duckett & Willcox 2015; PM&C 2014.

Deinstitutionalisation and Service Reform

- Psychiatric beds reduced from 30 000 to 8000 1960s to mid 00s
- Departmentalization of care needs
- Community focus of MHS (but not $$$) (1980s)
  - Richmond Report
- Compulsory treatment in the community
  - Victoria – highest rates in the world (CTO and LAI)
- Demand greatly outpacing service provision and spending
- National Inquiry into the Human Rights of People with Mental Illness: The Burdekin Report 1993

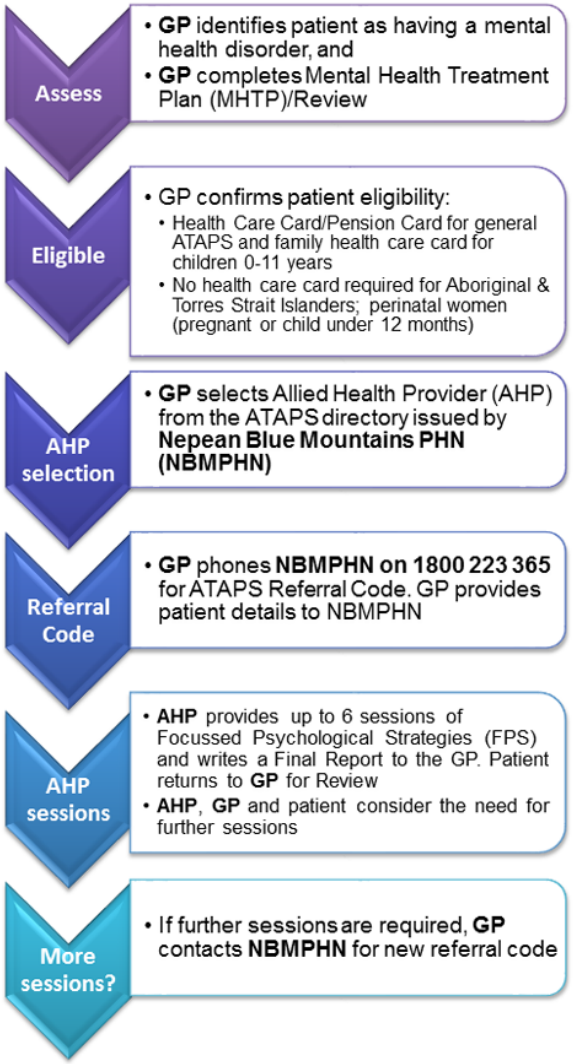


National Mental Health Reform

- National Mental Health Policy 1992
- The Mental Health Statement of Rights and Responsibilities 1991
- The 1st National Mental Health Plan 1993-1998
  - Goals: promoting better mental health in the community overall, reducing the impact of mental illness, assuring rights protected for consumers
  - Mainstreaming and Integration
  - Cross jurisdictional processes for oversight of implementation and evaluation reporting.
- The 2nd National Mental Health Plan 1998-2003
  - Increased consumer focus (later forming Mental Health Council)
  - Broadened expectations for public services, especially by diagnosis (low >> high prevalence)
  - Improving links between levels of services and Gov./Non. Gov organizations
  - Evaluation in 2003 – emphasised the need for increased funding to realize goals, emphasized gaps: consumer involvement, population groups needing better services – Indigenous and Forensic.
- The National Mental Health Plan 2003-2008
  - Introduced the recommendation of Recovery principles in care
  - Aspirational, less concrete goals and no extra funding

Building on better foundations – community focus for care

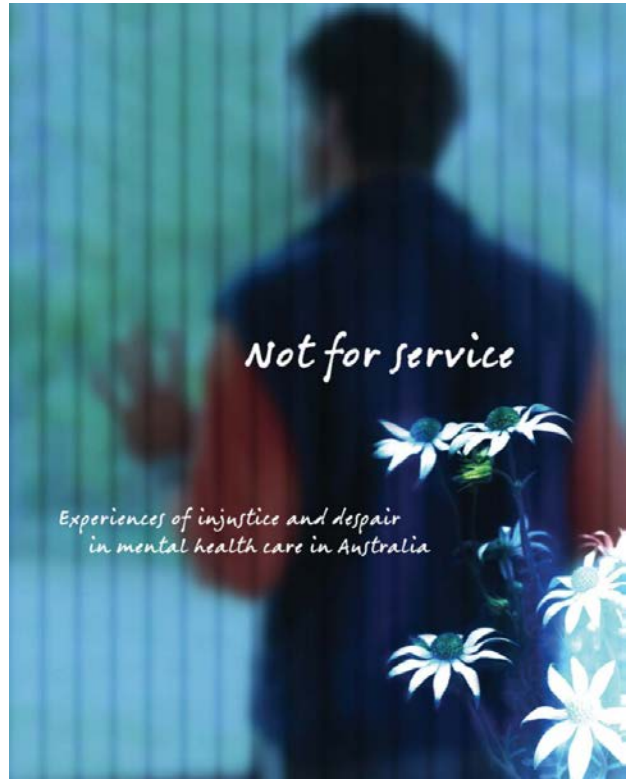
- Better Outcomes in Mental Health
  - Improving federally funded primary care (GP) capacity for high prevalence mental health problems
    - Financial incentives for GPs, education, new MBS items,
    - ATAPS – Access to Allied Health Psychological Services – medicare billing for allied health
    - Later PHN led programs



New Century and Growing concerns.

- Many state enquiries, e.g. NSW *Tracking Tragedy Report,* NSW review of fatal mental health sentinel events committee
- Mental Health Council Reports – *Out of Hospital, Out of Mind (2003) and the Not for Service Report (2005)*
- *2006 Senate Select Committee: from crisis to community*

"Recently when I phoned the triage service for help I was told that I had been categorised by the Mental Health Team as 'Not for Service'."
(Consumer, Victoria, Morwell Forum #17)
"I think for those who are severely ill and are isolated in the community due to their illness they often have no form of support even from family or friends. For people like that they are in the community living like ghosts – they are dying alone." (Consumer, Male, Victoria, Footscray Forum #11).



- 2005 review of National Policy
- National Action Plan on Mental Health 2006-2011
  - New funding, PHaMS, Day to day living programs and respite options
  - Political blowback, ignoring expert advice – fee for service programs 3x budgeted spending, State and Federal not collaborative
- 4th National Mental Health Plan
  - National service planning framework

National Standards for Mental Health Services

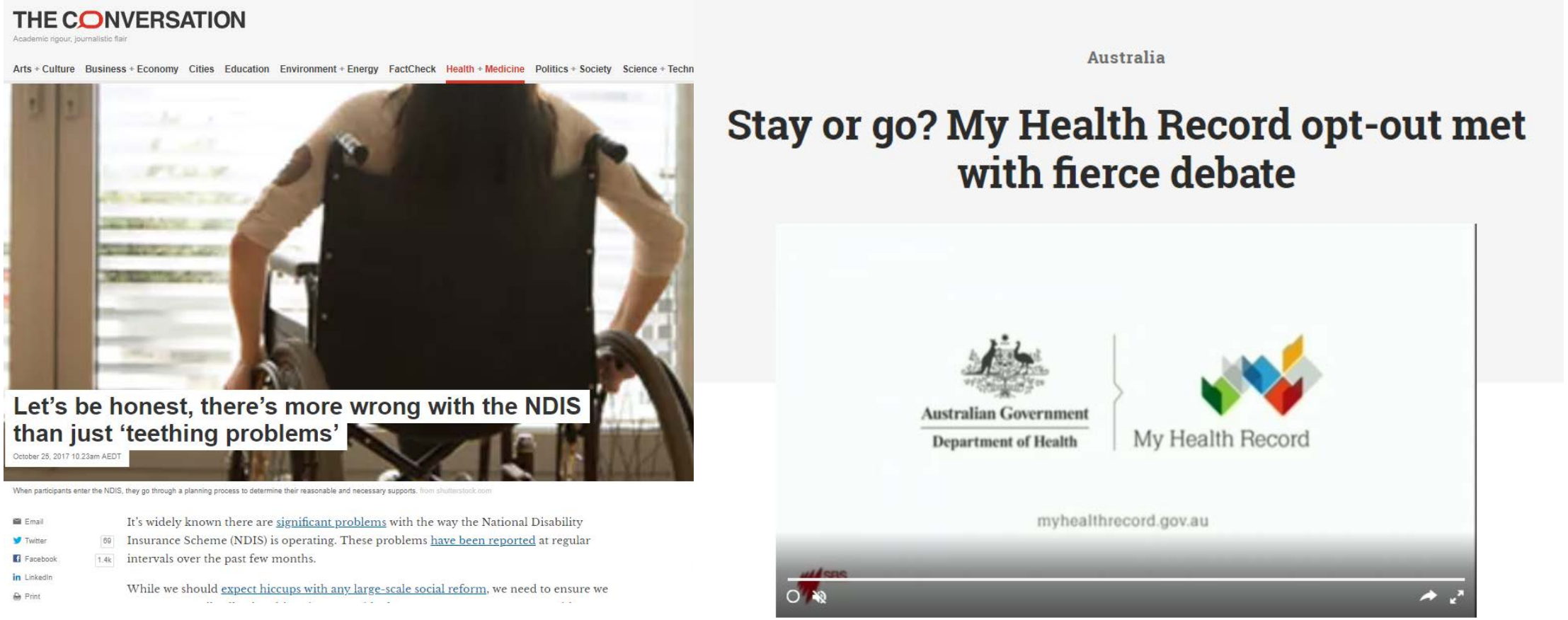
- *Standard 1. Rights and responsibilities*
- *Standard 2. Safety*
- *Standard 3. Consumer and carer participation*
- *Standard 4. Diversity responsiveness*
- *Standard 5. Promotion and prevention*
- *Standard 6. Consumers*
- *Standard 7. Carers*
- *Standard 8. Governance, leadership and management*
- *Standard 9. Integration*
- *Standard 10. Delivery of care*

- And accompanying National Practice Standards for MH Workforce

The 5th National Mental Health and Suicide Prevention Plan 2017-2022

- 8 Priority Areas
  - Achieving integrated regional planning and service delivery.
  - Effective suicide prevention.
  - Coordinated treatment and supports for people with severe and complex mental illness.
  - Improving Aboriginal and Torres Strait Islander mental health and suicide prevention.
  - Improving the physical health of people living with mental illness and reducing early mortality.
  - Reducing stigma and discrimination.
  - Making safety and quality central to mental health service delivery.
  - Ensuring that the enablers of effective system performance and system improvement are in place.

Watch this space……



- https://theconversation.com/lets-be-honest-theres-more-wrong-with-the-ndis-than-just-teething-problems-86225

Forensic Mental Health Services in Australia

- Until 1980s only a few *Forensicists* working in private practice
- Prisons and secure hospitals geographically and professionally isolated without specialists/trained staff
- In recent decades services and legal landscape changing steadily
  - 1991 – First Chair of Forensic Psychiatry
  - RANZCP Faculty of Forensic Psychiatry
  - Training and university degree programs for Forensic clinicians

Mental Illness and the Law

- Since Federation Common Law System plus variation in State to State statute
    - Wide discrepancies between the states and territories in both mental health laws and the law relevant to the mental element in crime
    - Until 1997 Victoria only had a common law *mental impairment defence*
    - Some states codified mental impairment (with some defining the conditions of the mind to be included) +/- codified diminished responsibility
- The Standing Committee of Attorneys General of the States and the Commonwealth 1995 Model Criminal Code
    - included the new defence of ***mental impairment***, (close to the McNaughton Rules)
    - mental impairment was extended to include severe personality disorder
    - In addition to *not knowing the nature and quality of the act and the not knowing it was wrong*, was added a third limb, of being rendered *unable to control the conduct*
    - Many states when reviewing their own law omitted the volitional element
    - One unique system – Queensland Mental Health Court
- 8 Different *Mental Health Acts*
    - Defining treatment of involuntary patients, ECT, seclusion/restraint, inpatient/community
    - Latest waves of MH Acts – shift of focus from risk to capacity
    - *Relative ease of civil committment*

A Model Forensic Service

- State to state variation
  - Hospitals
  - Prison governance and privatization
  - Court Liaison/Assessment services
    - State Law pathways and novel Courts
  - General mental health services
    - Capacity and willingness
  - Community programs
    - Referral pathways
    - Parallel and integrated systems

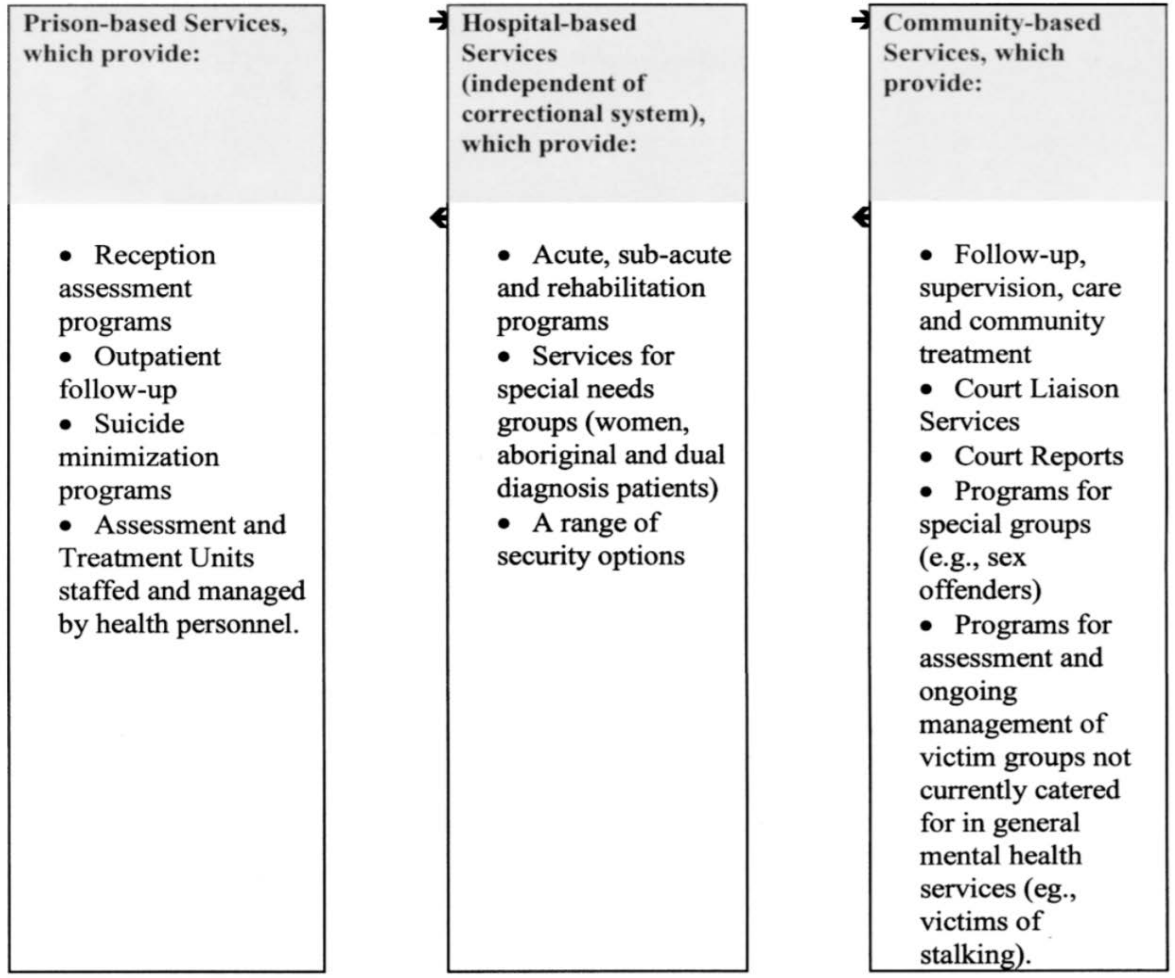


FIGURE 1. Continuum of care—Model forensic mental health service.

Fig. (Mullen, Briggs, Dalton & Burt, 2000)

Victoria's Forensic System: Forensic Patients

- Crimes (Mental Impairment and Unfitness to be Tried) Act 1997
  - At trial if mental impairment finding
    - Further assessment and report for disposition
      - Options: CSO, NCSO, release
  - Custodial Supervision Order: Forensic Patient
    - Secure hospital
    - Nominal term
    - Review, Leave panel
  - System pressure

NATIONAL VICTORIA

No room: Thomas Embling Hospital for Victoria's mentally ill prisoners a crisis 17 years in the making

AHMHAC National Statement of Principles for Forensic Mental Health

The Target Group

Rationale for National Principles

Service Boundaries

Competing Priorities of Professional Cultures

Legislation

Principle 1: Equivalence to the non-offender

Principle 2: Safe and Secure Treatment

Principle 3: Responsibilities of the Health, Justice and Correctional Systems

Principle 4: Access and Early Intervention

Principle 5: Comprehensive forensic mental health services

Principle 6: Integration and Linkages

Principle 7: Ethical Standards

Principle 8: Staff: Knowledge, Attitudes and Skills

Principle 9: Individualised care

Principle 10: Quality and Effectiveness

Principle 11: Transparency and Accountability

Principle 12: Judicial determination of detention/release

Principle 13: Legal reform

Some notable challenges….
Interagency cooperation (Health and Corrective Services, FMH and General MHS)

Booming prisoner numbers and lack of hospital beds whilst maintaining a standard of not providing involuntary treatment in custodial settings

Privatization of prisons and prisoner health services

Rates of mental illness in Australian prisons

- There were 41,202 prisoners on the night of 30 June 2017, representing a 6 per cent increase from 30 June 2016 and a 51 per cent increase from 30 June 2007
- 2005 study, CIDI, 12-month prevalence of any psychiatric illness
  - 80% in prisoners and 31% in the community.
  - symptoms of psychosis (OR=11.8, 95% CI 7.5–18.7),
  - substance use disorders (OR=11.4, 95% CI 9.7–13.6)
  - personality disorders (OR=8.6, 95% CI 7.2–10.3).
- Poor outcomes after release (Cutcher et al, 2014)

The health of Australia's prisoners 2015

Publication | Release Date: **27 Nov 2015** | Author: **AIHW** | Media release

PDF Report (4.8Mb)

DOWNLOAD REPORT

View other formats

The health of Australia's prisoners 2015 is the 4th report produced by the Australian Institute of Health and Welfare on the health and wellbeing of prisoners. The report explores the conditions and diseases experienced by prisoners; compares, where possible, the health of prisoners to the general Australian community and provides valuable insight into the use of prison health services. New to the 2015 report are data on the disabilities or long-term health conditions of prisoners entering the prison system (prison entrants), self-assessed mental and physical health status of prisoners and data on smoke-free prisons.

ISBN: 978-1-74249-866-9

Cat. no: PHE 207

Pages: 244

1 in 4 prisoners received medications for mental health related issues while in prison

2 in 3 prison entrants had not studied past year 10

1 in 2 prison entrants were unemployed in the 30 days before entering prison

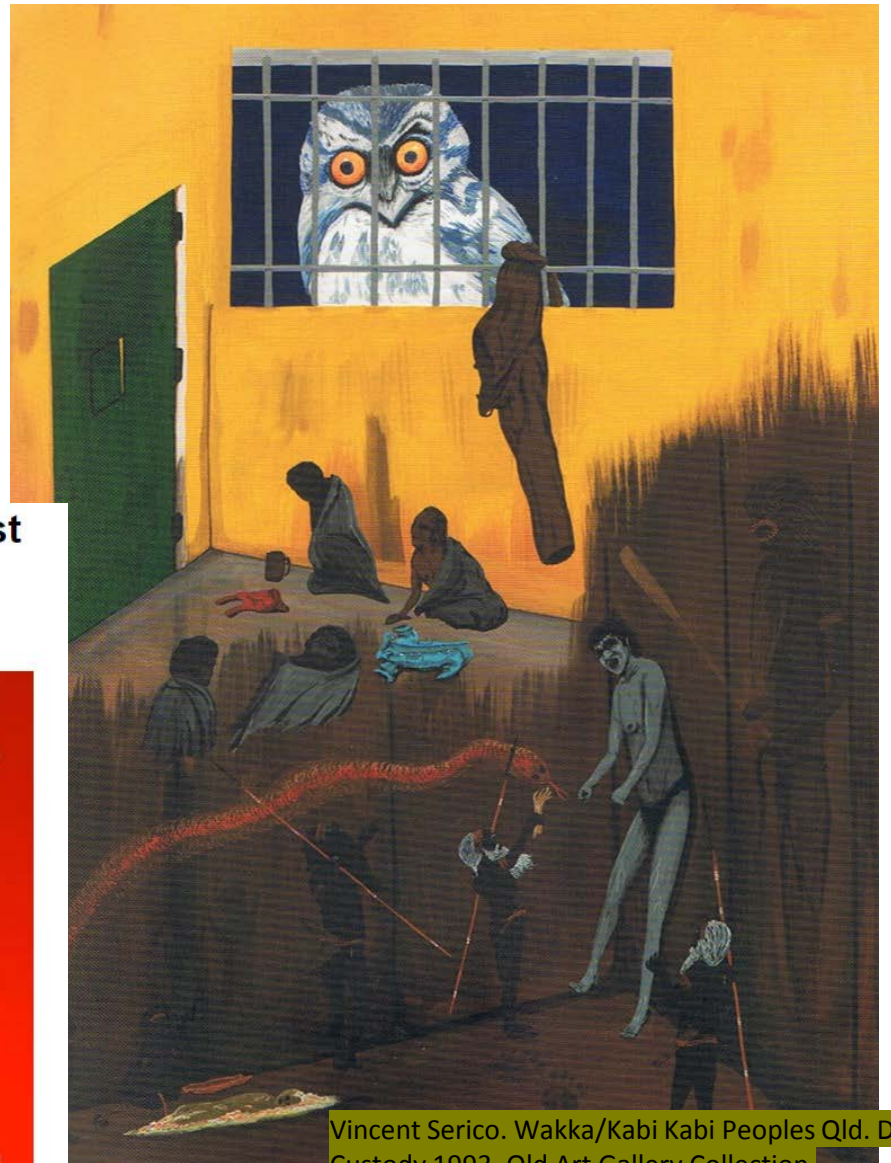
2 in 3 prison entrants used illicit drugs in the 12 months prior to prison

Over 1 in 4 Australian Prisoners are Aboriginal

Ricky Maynard, Untitled, Qld Art Gallery

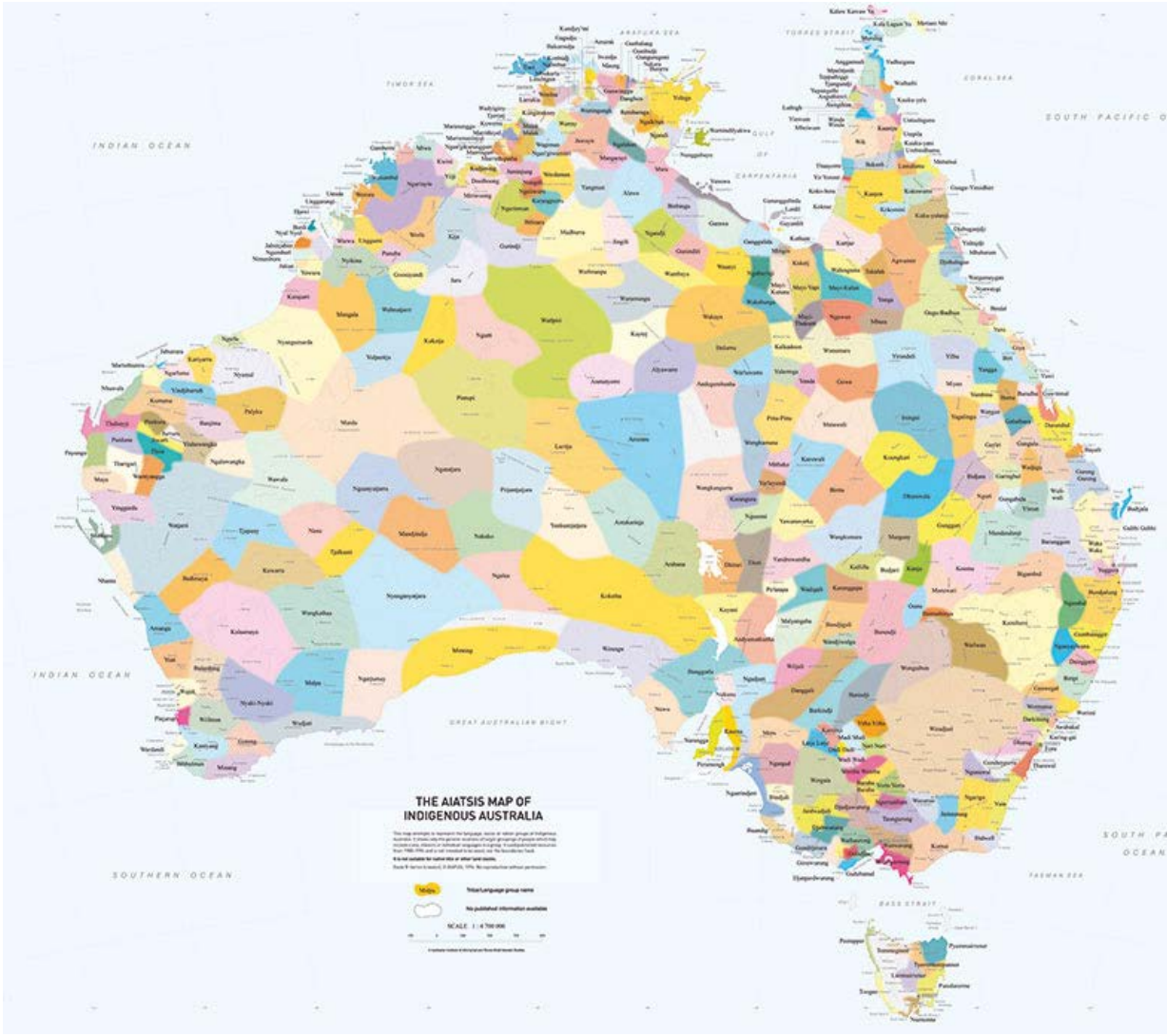
FactCheck Q&A: are Indigenous Australians the most incarcerated people on Earth?

June 6, 2017 2.27pm AEST



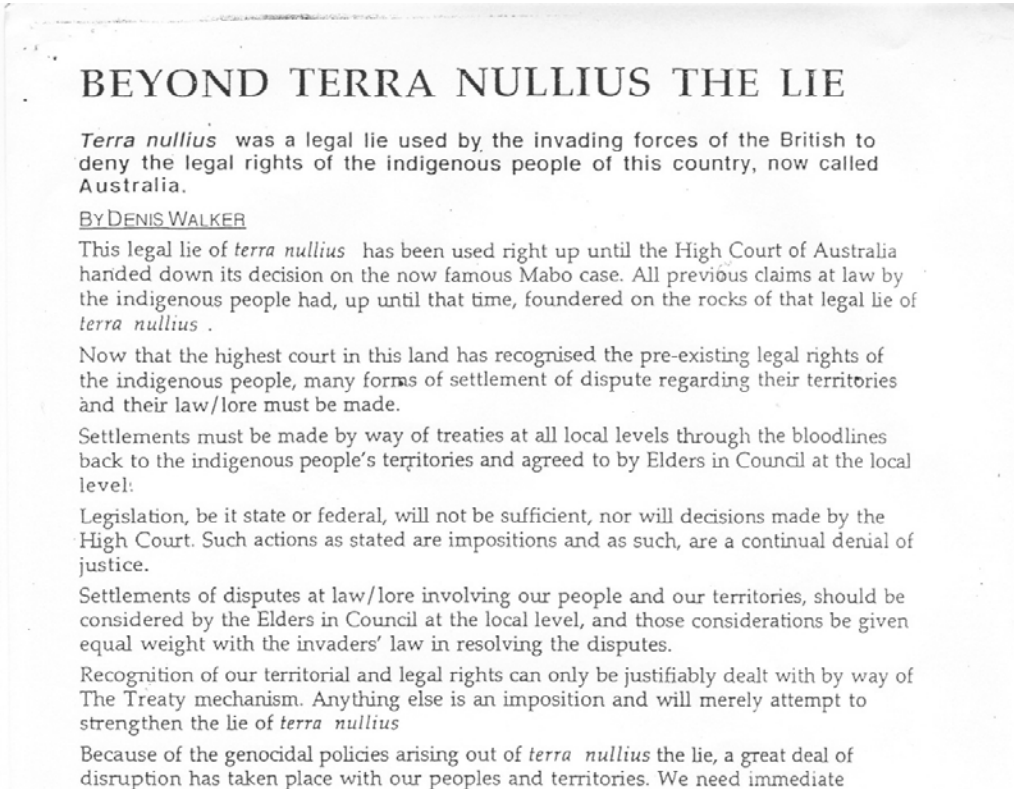
Vincent Serico. Wakka/Kabi Kabi Peoples Qld. Deaths in

- Australia’s First people
  - Aboriginal and Torres Strait Islanders
  - Dates back estimated 50, 000 + years
  - Estimated population pre European arrival – 750, 000 + reduced to less than 100,000 by 1900



The invasion

- 1788 – arrival of Captain Cook and the First Fleet
  - A white vision – settlement of a new colony
  - Aboriginal persons – invasion
- Aboriginal Protection Boards
  - Reserves
  - Classification
  - Forced removal of children
  - Loss of identity, culture and connection
- Post WW2
  - Returned Aboriginal soldiers
  - Activism and recognition of harms



BEYOND TERRA NULLIUS THE LIE

Terra nullius was a legal lie used by the invading forces of the British to deny the legal rights of the indigenous people of this country, now called Australia.

BY DENIS WALKER

This legal lie of *terra nullius* has been used right up until the High Court of Australia handed down its decision on the now famous Mabo case. All previous claims at law by the indigenous people had, up until that time, foundered on the rocks of that legal lie of *terra nullius* .

Now that the highest court in this land has recognised the pre-existing legal rights of the indigenous people, many forms of settlement of dispute regarding their territories and their law/lore must be made.

Settlements must be made by way of treaties at all local levels through the bloodlines back to the indigenous people's territories and agreed to by Elders in Council at the local level.

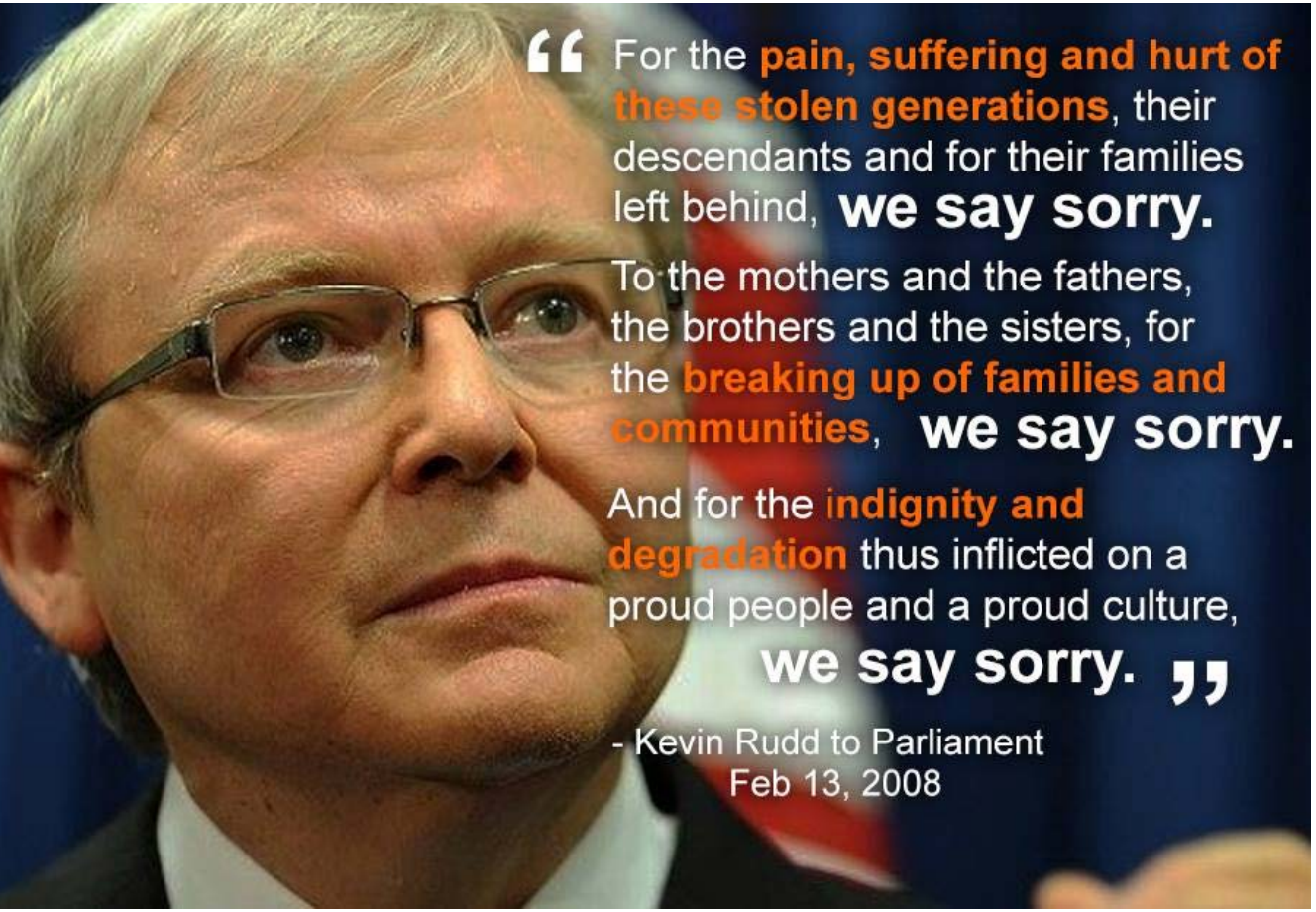
Legislation, be it state or federal, will not be sufficient, nor will decisions made by the High Court. Such actions as stated are impositions and as such, are a continual denial of justice.

Settlements of disputes at law/lore involving our people and our territories, should be considered by the Elders in Council at the local level, and those considerations be given equal weight with the invaders' law in resolving the disputes.

Recognition of our territorial and legal rights can only be justifiably dealt with by way of The Treaty mechanism. Anything else is an imposition and will merely attempt to strengthen the lie of *terra nullius*

Because of the genocidal policies arising out of *terra nullius* the lie, a great deal of disruption has taken place with our peoples and territories. We need immediate

Still a long way to go



One year on and the " Uluru Statement from the Heart" r relevant as ever....

NEWS 23rd May 2018

Aboriginal Australians Crime and Victimization

- Aboriginal women estimated to be 45x more likely to be victims of IPV
- Child abuse and children out of care
  - 20% of all children in out of home care are Aboriginal
- Culturally insensitive and disempowering systems with bad results
  - See V Hovane PhD thesis – Edith Cowan University
  - Themes
    - Surviving the system, misusing power, fear of repercussions, avoiding exposure, holding Aboriginal Law

Australia's history of Gun Law Reform

- Mass gun violence events dating back to 1920's
- Queen Street and Hoddle Street Massacres in 1987
  - Meeting of Prime Minister and State Premiers' Departments
  - National Committee on Violence
    - National and International Experts and evidence sought
    - Australia's crime rates similar to US
    - Ease of access to high powered guns
    - Extensive consultation and meetings with experts and Govt. Depts.
    - Report *Violence: Directions for Australia (1990)*
      - *Among 138 recommendations 20 related to gun regulation*
    - Established the ongoing role of AIC, including monitoring of homicide and gun crime data
    - Australian state premiers met in 1987 and were urged to adopt a national approach to gun ownership law
- Port Arthur Massacre 1996
  - Australian Police Ministers' Council agreed to a 10 point national plan
  - National firearms amnesty program and buyback scheme and further amnesty periods

Nationwide Agreement

- **Bans on Specific Types of Firearms**
  - The only need for the use of an automatic or semi-automatic longarm would be: military; police (or rarely licensed for a specified purpose (eg extermination of feral animals). Ban competitive shooting involving those firearms and to be banned from import.
- **Effective Nationwide Registration of All Firearms**
- **Genuine Reason for Owning, Possessing or Using a Firearm**
  - ***All jurisdictions confirm that personal protection is not a genuine reason for owning , possessing or using a firearm***
  - Reasons have increasing stringency across firearm classes
- **Basic Licence Requirements**
  - 18 years +, fit and proper person, address confirmed, min. 28 day waiting period, max. licence period 5 years,
  - must complete safety training, penalties for any infringements.
- **Training as a Prerequisite for Licensing**
  - Standardized and quality control
- **Grounds for Licence Refusal or Cancellation and Seizure of Firearms**
  - Not of good character; criminal convictions, not complying with licencing or storage requirements,
  - Specific reasons; family violence orders, history of assault (time frames). Mental and physical illness
- **Permit to Acquire**
  - Separate permit for every firearm including 28 day min. wait.
- **Uniform Standard for the Security and Storage of Firearms**
  - Including separate storage of ammunition
- **Recording of Sales**
- **Mail Order Sales Control**
- **Uniform monetary compensation funded federally**

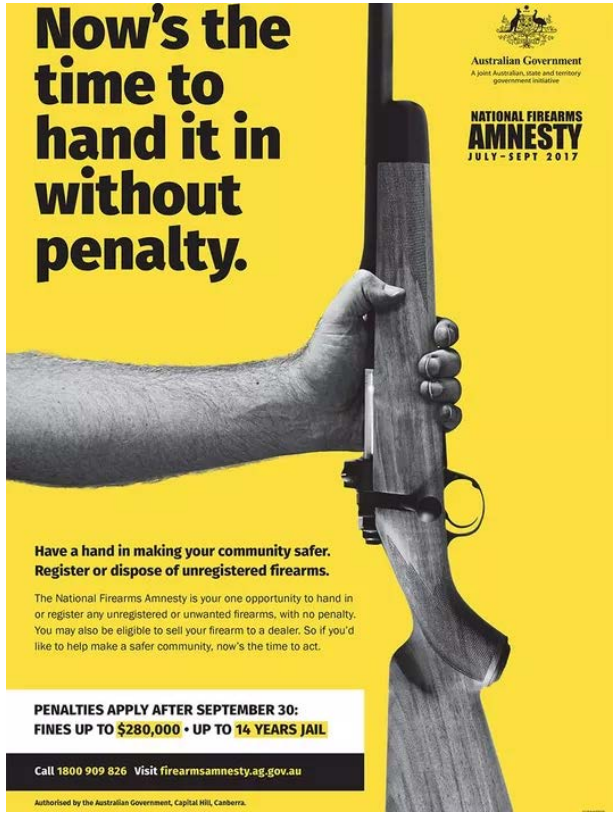


Table 1 Mass shootings* in Australia, January 1979–October 2006

Date	Location and state	Victims killed by gunshot	Perpetrators killed	Total killed by gunshot	Victims wounded	Perpetrators
28 April 1996	Port Arthur, TAS	35	0	35	19	Martin Bryant
25 January 1996	Hillcrest, QLD	6	1	7	0	Peter May
31 March 1993	Cangai, NSW	5	1	6	0	Leabeater and Steele
27 October 1992	Terrigal , NSW	6	0	6	1	Malcolm Baker
17 August 1991	Strathfield, NSW	6	1	7	7	Wade Frankum
30 August 1990	Surry Hills, NSW	5	0	5	0	Paul Evers
25 September 1988	Oenpelli, NT	6	0	6	0	Dennis Rostron
8 December 1987	Queen St, VIC	8	1	9	5	Frank Vitkovic
10 October 1987	Canley Vale, NSW	5	1	6	1	John Tran
9 August 1987	Hoddle St, VIC	7	0	7	19	Julian Knight
19 June 1987	Top End, NT/WA	5	1	6	0	Josef Schwab
1 June 1984	Wahroonga, NSW	5	1	6	0	John Brandon
24 September 1981	Campsie, NSW	5	1	6	0	Fouad Daoud
Total		104	8	112	52	

*Definitions of ''mass shooting'' and ''mass homicide'' have ranged from 3 to 5 victims killed.[28 29] To exclude most of the more common firearm-related spousal and family violence killings, ''mass shooting'' is defined here as one in which ⩾5 firearm-related homicides are committed by one or two perpetrators in proximate events in a civilian setting, not counting any perpetrators killed by their own hand or otherwise.
Details of each case were collected from police and coroners' files, by personal communication with police and counsel involved, or as a last resort from corroborating newspaper reports.

2016 JAMA


Observed
Trend (after 1996)
Trend (before 1996)
A Total firearm and nonfirearm suicide deaths
Total Suicide Deaths per 100 000 Population
B Firearm suicide deaths
Firearm Suicide Deaths per 100 000 Population
C Nonfirearm suicide deaths
Nonfirearm Suicide Deaths per 100 000 Population
D Total firearm and nonfirearm homicide deaths
Total Homicide Deaths per 100 000 Population
E Firearm homicide deaths
Firearm Homicide Deaths per 100 000 Population
F Nonfirearm homicide deaths
Nonfirearm Homicide Deaths per 100 000 Population
G Total firearm and nonfirearm suicide and homicide deaths
Total Deaths per 100 000 Population
H Total firearm suicide and homicide deaths
Total Firearm Deaths per 100 000 Population
I Total nonfirearm suicide and homicide deaths
Total Nonfirearm Deaths per 100 000 Population
Calendar Year
1979
1985
1991
1997
2003
2009

Table 3. Trends in Intentional Firearm Mortality and Nonfirearm Suicide and Homicide Rates Before and After 1996 and Ratio of Trends[a]

Mortality	Trend in Annual Death Rate per 100 000 Population (95% CI)		Annual Death Rate, RT (95% CI)[b]	*P* Value	Annual Death Rate, RL (95% CI)[c]	*P* Value
	1979-1996	1997-2013				
Firearm deaths						
Total	0.970 (0.963-0.976)	0.951 (0.940-0.962)	0.981 (0.968-0.993)	.003	0.669 (0.589-0.760)	<.001
Suicide	0.970 (0.964-0.976)	0.952 (0.942-0.962)	0.981 (0.970-0.993)	.001	0.652 (0.582-0.731)	<.001
Homicide	0.969 (0.955-0.983)	0.945 (0.922-0.969)	0.975 (0.949-1.001)	.06	0.769 (0.590-1.004)	.05
Homicide (nonmass)[d]	0.958 (0.947-0.969)	0.945 (0.922-0.969)	0.985 (0.962-1.009)	.20	0.920 (0.727-1.163)	.05
Nonfirearm deaths						
Total	1.021 (1.016-1.026)	0.986 (0.980-0.993)	0.966 (0.958-0.973)	<.001	1.054 (0.974-1.141)	.20
Suicide	1.023 (1.018-1.028)	0.988 (0.982-0.994)	0.965 (0.958-0.973)	<.001	1.070 (0.988-1.159)	.10
Homicide	1.009 (0.998-1.019)	0.974 (0.962-0.988)	0.965 (0.950-0.981)	<.001	0.941 (0.803-1.103)	.50
Total homicide and suicide deaths	1.008 (1.004-1.012)	0.983 (0.977-0.990)	0.975 (0.968-0.983)	<.001	0.991 (0.918-1.071)	.80
Total suicide	1.010 (1.006-1.014)	0.985 (0.979-0.991)	0.975 (0.968-0.982)	<.001	1.004 (0.931-1.083)	.90
Total homicide	0.997 (0.990-1.003)	0.969 (0.956-0.982)	0.972 (0.958-0.986)	<.001	0.908 (0.784-1.050)	.20

Abbreviations: RL, ratio of levels; RT, ratio of trends.

[a] Table 3 reports the slopes (trend) in annual death rate per 100 000 population up to and including 1996 and after 1996; the ratio of slopes, calculated as slope for 1997 and later divided by slope for 1996 and earlier; and the ratio of level of death rate, which compares the death rates immediately around 1996. All estimates are obtained from negative binomial models.

[b] Ratio of trends calculated as trend in annual death rate in 1997-2013 divided by trend in annual death rate in 1979-1996 with 95% CI.

[c] Ratio of levels is estimated from the main effect of *Law* in model c and represents the shift in annual death rates around the time of the introduction of gun control laws.

[d] Mass gun-related homicides removed from counts of deaths in corresponding calendar year.

Fatal Firearm Incidents Before and After 1996.

Chapman, S., Stewart, M., Alpers, P. & Jones, M. (2018) Annals of Internal Medicine.

Variable	Months, *n*	Mass Shootings, *n*	Expected Mass Shootings Under Constant Rare Events Model
Before legislation*	210	13	$\frac{13}{210+260} \times 210 \approx 5.809$
After legislation†	260	0	$\frac{13}{210+260} \times 260 \approx 7.191$

LR test comparing constant and changepoint model fits:

Asymptotic (actual data)

$$LR = \left[\frac{e^{-13}13^{13}}{13!}\frac{e^{-0}0^{0}}{0!}\right] \Big/ \left[\frac{e^{-5.809}5.809^{13}}{13!}\frac{e^{-7.191}7.191^{0}}{0!}\right] \approx 35313.9$$

$$P = P\left(\chi_1^2 \geq 2log_e\,(35313.9) \approx 20.95\right) \approx 4.7 \times 10^{-6}$$

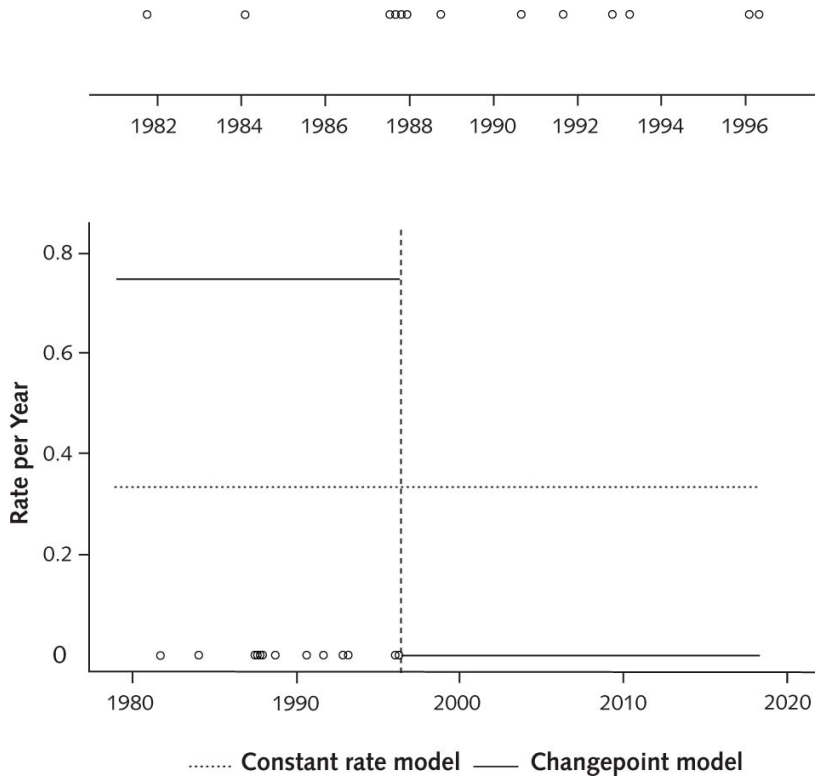
Asymptotic (perturbed data)

$$LR = \left[\frac{e^{-13}13^{13}}{13!}\frac{e^{-1}1^{1}}{1!}\right] \Big/ \left[\frac{e^{-6.255}6.255^{13}}{13!}\frac{e^{-7.745}7.745^{1}}{1!}\right] \approx 1741.9$$

$$P = P\left(\chi_1^2 \geq 2log_e\,(1741.9) \approx 14.93\right) \approx 1.1 \times 10^{-4}$$

Bootstrap resampling‡

$$P = 137/20 \text{ million} = 6.9 \times 10^{-6}$$



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- Australian Bureau of Statistics http://abs.gov.au
- Australian health system https://aihw.gov.au/getmedia/f2ae1191-bbf2-47b6-a9d4-1b2ca65553a1/ah16-2-1-how-does-australias-health-system-work.pdf.aspx
- For Australian History see: http://nma.gov.au/online_features/defining_moments
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- Carrot and stick reforms have failed Private health insurance in Australia https://theconversation.com/private-health-insurance-carrot-and-stick-reforms-have-failed-heres-why-38501
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(some of) Australia's great Forensic Mental Health researchers and institutions

- Swinburne University Centre for Forensic Behavioural Science
  - http://swinburne.edu.au/research/forensic-behavioural-science/our-research/
  - Professor J Ogloff
    - https://swinburne.edu.au/research/our-research/access-our-research/find-a-researcher-or-supervisor/researcher-profile/?id=jogloff
  - Dr Troy McEwan
    - https://swinburne.edu.au/research/our-research/access-our-research/find-a-researcher-or-supervisor/researcher-profile/?id=tmcewan
- Retired: Prof P Mullen
  - https://research.monash.edu/en/persons/paul-mullen/publications/
  - https://commons.swinburne.edu.au/items/cd370681-f6f6-416f-85ef-94bbc0575105/1/
- NSW Justice Health and Forensic Mental Health Network UNSW Forensic Mental Health
  - http://justicehealth.nsw.gov.au/publications
  - https://forensicmentalhealth.med.unsw.edu.au/node/305100222
- Queensland Centre for Mental Health Research
  - http://qcmhr.uq.edu.au/research-streams/forensic-mental-health/
- Fixated Research Group
  - http://fixatedthreat.com/index.php
- National empowerment project
  - http://nationalempowermentproject.org.au
- University of Melbourne and the Social Equity Network
  - https://socialequity.unimelb.edu.au
  - Prof B McSherry https://www.findanexpert.unimelb.edu.au/display/person271242
  - Prof Stuart A Kinner https://findanexpert.unimelb.edu.au/display/person539793
- Ian Freckleton QC http://ianfreckelton.com.au/
- Orygen Youth Mental Health https://www.orygen.org.au/Research/Research-Areas
- Australian Institute of Family Studies https://aifs.gov.au
- Analysis and Policy Observatory; makes public policy research visible, discoverable and usable http://apo.org.au/