VICTORIAN INSTITUTE OF FORENSIC MEDICINE

MONASH University

STOP THE COWARD PUNCH CAMPAIGN

RESEARCH PROGRAM 2021-2022

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Ethics

This project was approved by the Department of Justice and Community Safety Human Research Ethics committee (CF/20/17578) and the Victorian Institute of Forensic Medicine Research and Ethics Committees (RAC28/2019 and EC23/2019).

Research Team

This research was coordinated by the Victorian Institute of Forensic Medicine and the Department of Forensic Medicine, Monash University. The following people contributed to this project:

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EXECUTIVE SUMMARY

One punch assault, also known as ‘coward punches’, are now recognised as a serious form of social violence that has taken the lives of many Australians. The impacts of these tragic assaults are lifelong and far reaching, changing the lives of victims, perpetrators, families, friends, and communities. Over the past decade in Australia, nationwide education and awareness campaigns to prevent one punch assaults have accompanied the introduction of legislation throughout numerous Australian jurisdictions, mandating minimum sentences for perpetrators. This research aimed to examine the survivors, fatalities, and perpetrators of one punch assaults in Australia, to inform preventive community and policy strategies.

This report outlines a program of work examining 7287 trials, 5341 clinical forensic case files, and 304 coronial investigations, spanning the years between 1990 and 2020 throughout Australia.

At least 288 offenders were convicted for a fatal one punch assault in Australia between 1990 and 2020. Perpetrators were predominantly males aged in their mid-twenties. Approximately two thirds were sentenced to a term of imprisonment, with one in five receiving community-based orders. Interestingly, only around 10% were charged with one-punch specific laws, with the majority (>60%) charged with manslaughter, followed by murder. Alcohol is still the most used drug amongst one punch assaults, with at least two thirds of perpetrators drinking at the time of the incident.

Survivors of one punch assaults assessed by forensic practitioners at the Victorian Institute of Forensic Medicine between November 2012 and August 2020 totalled 109. These survivors were left with severe injuries and permanent physical and mental disability, requiring complex and prolonged medical care to address and ameliorate the injury impact. Survivors were predominantly males (87%) aged in their mid-thirties. The most common injury was facial fractures, reported in 45% of survivors, with 95% requiring medical care, including lifesaving surgical interventions and reconstructive surgeries. Prolonged intensive care unit stays were also common. The prevalence of cases involving further assault in addition to the initial coward punch (*Type 2* cases) demonstrates the importance of understanding the characteristics of these cases in order to inform prevention strategies.

The concerted effort towards prevention of one punch assaults appears to be working, with a decline in deaths since 2012. Whereas the victim typology in our previous study was a 33-year-old male at a licenced venue at the weekend, this study demonstrated a shift to a different demographic; a 43.5-year-old male in a domestic setting during the week. What has remained consistent over time is the involvement of alcohol. This work highlights the importance of public health surveillance in providing a current evidence base to inform policy and practice. We now

know that 170 Australians have lost their lives to a one punch assault since 2000. More needs to be done to curb these preventable assaults and the impact they have on the Australian community.

PERPETRATOR CHARACTERISTICS AND SENTENCING OUTCOMES IN FATAL ONE PUNCH ASSAULTS IN AUSTRALIA

SUMMARY

An exploratory and medicolegal analysis of the perpetrator characteristics and outcomes in one punch assaults in Australia was undertaken. At least 288 offenders were convicted for a fatal one punch assault in Australia in the period 1990-2020. These offender cases involved 235 violent incidents and 258 victims.

RESEARCH QUESTION

What are the perpetrator, victim and incident characteristics, as well as sentencing, offence, and injury outcomes of fatal one punch assaults in Australia?

METHODS

Study design: This was a retrospective observational study. Sentencing documents or trials were extracted from *Lexis Advance* database. *Lexis Advance is* a legal research software, and part of the LexisNexis suite of tools for lawyers. The legal research platform features a search module that uses natural language search or *Boolean* search for data on various legal issues. The judgements provide the sentencing outcome and incident circumstances in narrative format. Judgement documents were from cases heard in the Supreme Court Appeals court and Ministry of Home Affairs Tribunals.

Search strategy: Key word searching was employed and multiple search connectors (or, near/n, and, and not) were used to identify the fatal outcomes cases**.**

Inclusions:

- ***Time period and Jurisdiction:***
  Included judgements were in the period of January 1990 to December 2020, inclusive, pertaining to all Australian jurisdictions.
- ***Injury mechanism:***
  Two types of injury mechanisms were included:
  - *Type 1:* the perpetrator punched the victim's head/face and the head made subsequent contact with a static object (e.g., ground or wall).

- *Type 2:* the perpetrator punched the victim to the ground, after which subsequent blows to head were delivered.

- ***Neurologic signs*** could be *immediate or late onset* and included:
  Convulsions, headache, vomiting, loss of consciousness, seizures, dizziness, drowsiness, disorientation, poor recall or post traumatic amnesia, head spinning, and feeling *dazed* or *stunned*.
- ***Incident outcome:*** Only fatal or mixed outcome cases (with at least one fatality amongst multiple victims) were included.

Exclusions: Cases with contact with objects, neck compression, sharp force (knife, gunshot) injuries, bite marks, sexual assaults and thermal mechanisms and fall from heights were excluded.

RESULTS

Of 7287 trials that were screened, 178 were deemed eligible for inclusion. These cases involved complex incident-perpetrator-victim scenarios.

- Single perpetrator-single victim: 71.3% of 178 trials
- 28.7% of the trials were either: single perpetrator-multiple victims (6.7%); multiple perpetrators-single victim (17.4%); multiple perpetrators–multiple victims (5%).

PERPETRATOR, VICTIM, AND INCIDENT CHARACTERISTICS

Demographic characteristics of perpetrators: (N=288). The larger number of perpetrators is due to some cases involving multiple perpetrators.

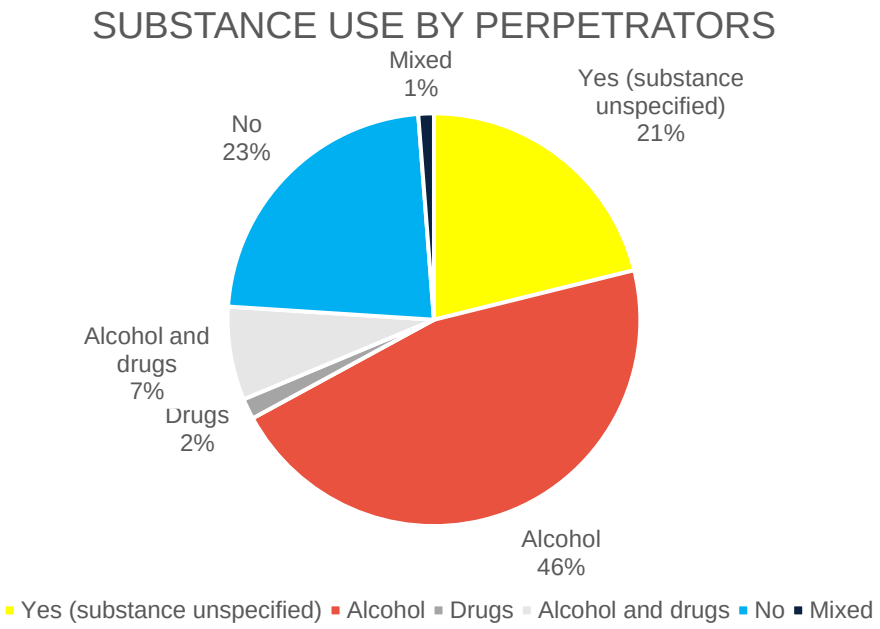
- Perpetrators were predominantly males (98.6% males).
- Perpetrators had a median age of 26 years ranging from 15-69 years.
- 37.2% of the perpetrators were from New South Wales followed by 24% from Victoria.

Interpersonal characteristics (index cases were perpetrators; N=288)

- Perpetrators were unknown or strangers to their victims in 55% of cases.
- Perpetrators were known to their victims in 42% of cases.
- <5 cases had unavailable data.

Substance use by perpetrators (N=288)

187 (64.9%) of perpetrators were involved in substance use. The substance was unspecified in 52 cases. Alcohol use was reported in 113 cases; both alcohol and drug usage in 18; and drugs only in <5 cases.



Demographic characteristics of the victims: (N=258). The larger number of victims is due to some cases involving multiple victims.

- Median age 41 years (range 14-89).
- Predominantly males (92.6%).

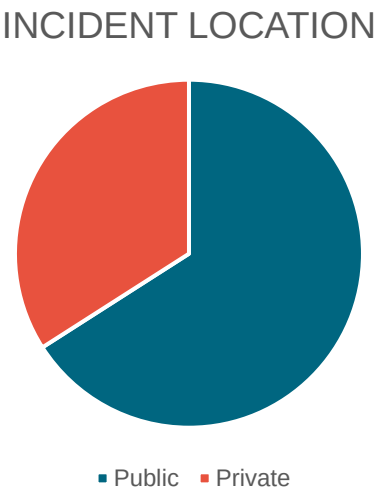
Injury mechanisms (N=258)

- 67.4% of the victims were *Type 1* cases, i.e., there was a secondary head impact against a hard surface after being punched to head.
- 32.6% were *Type 2* cases, i.e., the victim was punched down to the ground and further hit on the head through bodily force application. Victim was incapacitated by the initial one punch that left them unable to defend themselves against additional inflicted trauma to head.

Incident characteristics (N=235):

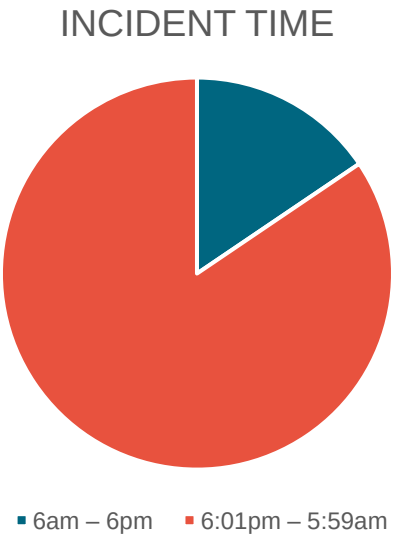
Location

- 65.1% of incidents occurred in public locations.
- 33.6% of incidents occurred at private venues.
- <5 cases had unavailable data.



Time of the day

- 74% of the incidents occurred between 6pm to 6am.



SENTENCING, OFFENCE, AND INJURY OUTCOMES

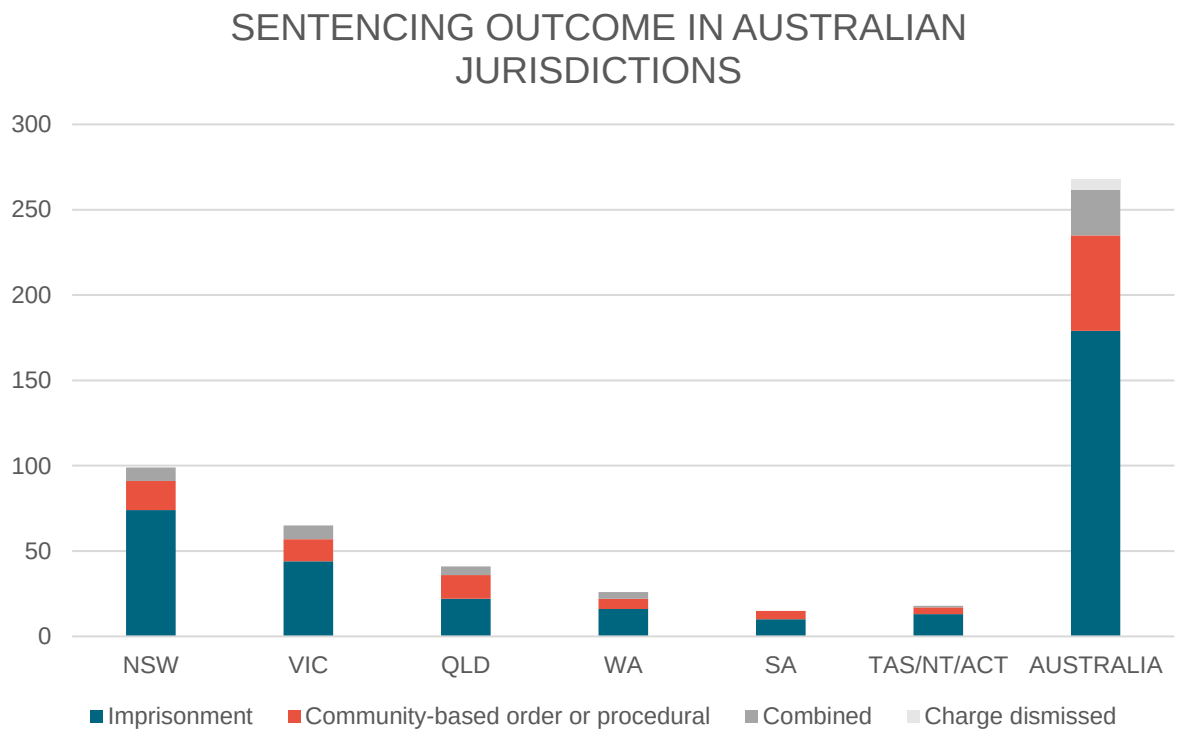
Sentencing outcome

The outcomes were classified under four subcategories: imprisonment, community-based orders or procedural, combined, and charge dismissed.

- 62.2% of perpetrators had a sentencing outcome of imprisonment.
- 19.4% had community-based orders or procedural outcomes.

- Procedural outcome meant retrial, acquittal, failed appeal, trial ongoing, offender's visa was cancelled/offender was deported.

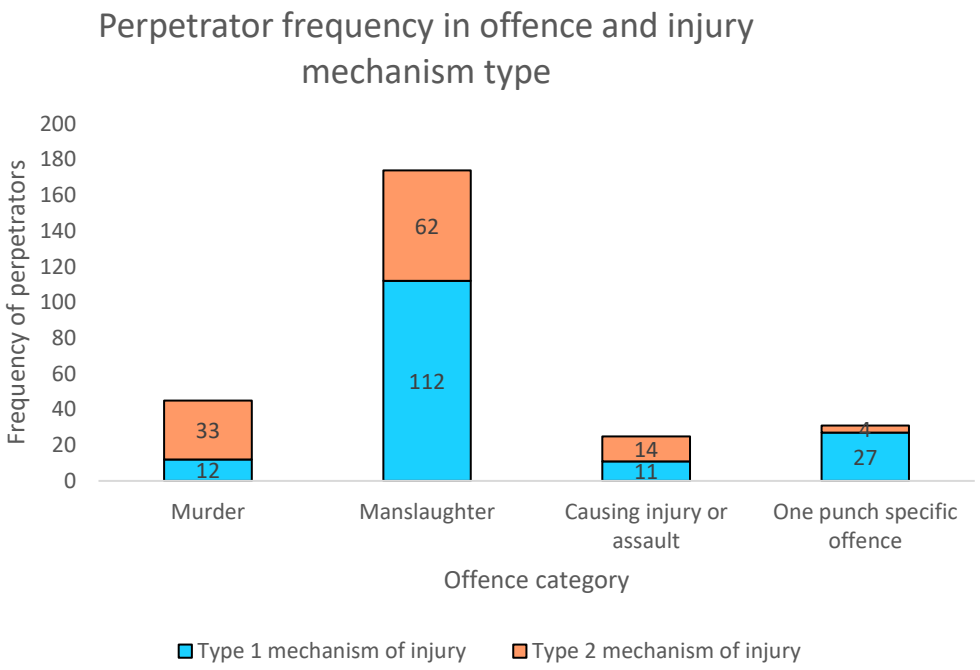
- 9.4% had a combined outcome of either imprisonment, monetary penalty, community-based order and/or procedural outcomes.
- 2.1% had a case dismissed outcome.



Offence outcome

Offences or charges were classified under FOUR categories: murder, manslaughter, causing injury or assault, and one punch-specific offence.

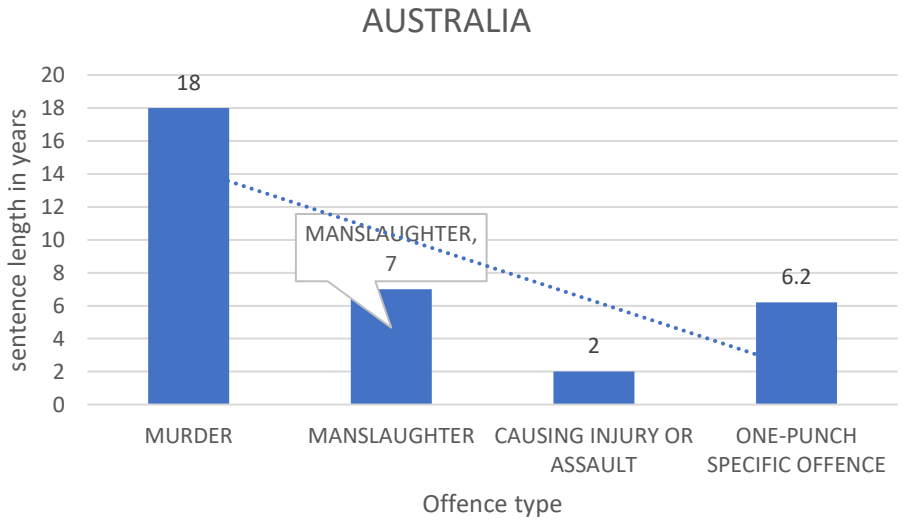
- 60.4% perpetrators were charged with manslaughter.
- 15.6% perpetrators were charged with murder.
- 10.8% perpetrators were charged with one punch-specific offences or laws.
- 8.9% perpetrators were charged with causing injury or assault.



Sentence Length

The median effective sentence length in Australia was:

- Murder, 18.0 years (range 17.3-20.0)
- Manslaughter, 7.0 years (range 3.8-8.0)
- One punch-specific offence, 6.2 years (range 4.3-9.0)
- Causing injury or assault, 2 years (range 1.0-4.9)



Injury outcomes

The following injuries to the victim were noted within the sentencing documents:

- **Skeletal:** Skull and facial fracture.
- **Intracranial:** Hematoma (subarachnoid, subdural, epidural), swelling, infarct, axonal injury Vertebral: Arterial tear and basal subarachnoid haemorrhage.
- **Facial:** Bruise, laceration, abrasion, swelling, tenderness, paraesthesia, hematoma, bleeding, retinal and corneal tear.
- **Dental:** Teeth displacement, avulsion, fracture, malocclusion.

SURVIVOR CHARACTERISTICS AND INJURY OUTCOMES OF ONE PUNCH ASSAULTS IN FORENSIC SERVICE CONTACTS AT THE VICTORIAN INSTITUTE OF FORENSIC MEDICINE

SUMMARY

One hundred and nine survivors suffered one punch assaults in Victoria according to an exploratory analysis of expert opinions by forensic practitioners at the Victorian Institute of Forensic Medicine, between November 2012 and August 2020. One punch assaults caused considerable injuries and debilitation in the survivors. Complex and prolonged medical care was required to address and ameliorate the injury impact.

RESEARCH QUESTION

What are the survivor characteristics, injury patterns and service requirements in survivors of one punch assaults in Victoria?

METHODS

Study design: This was a retrospective observational study.

Study setting: The study was conducted on cases assessed by the Victorian Institute of Forensic Medicine's (VIFM) forensic practitioners (e.g. forensic physicians, registrars, medical officers, and nurses). These state forensic medical service providers perform forensic medical examinations and expert opinions as requested by judicial agencies in Victoria.

Data source: VIFM's Internal case management system for Clinical Forensic Medical casework (iCFM). All VIFM patient records are stored in a purpose-built case management system called iCFM, with cases dating from November 2012. Eligible case records were expert opinion reports. These expert opinions were based on police statement of circumstances, medical records, witness statements, photographs, and CCTV footage (if provided).

Query design: A Structured Query Language search was conducted to identify eligible cases in iCFM. The eligible incident type was 'physical assault' and key word filters were 'king hit', 'one punch', 'single punch', 'blow', 'hit', 'unconscious', 'head injury', 'subdural', 'subarachnoid', 'traumatic brain injury', and 'skull fracture'.

Inclusion criteria:

- ***Time period and jurisdiction:***

Expert opinions were in the time-period of November 2012 to August 2020. Jurisdiction was limited to Victoria.

- ***Injury mechanism:***

  Two types of injury mechanisms were included:

  - *Type 1:* the perpetrator punched the survivor's head/face and the head made subsequent contact with a static object (e.g., ground or wall).
  - *Type 2:* the perpetrator punched the survivor to ground after which subsequent blows to head were delivered.

- ***Neurologic signs*** included headache, vomiting, loss of consciousness, seizures, dizziness, drowsiness, disorientation, memory loss, and feeling dazed or stunned. There were three distinct categories:
  - *immediate*
  - *late onset*
  - *no neurologic sign*
- ***Incident outcome:*** Only survivors (nonfatal outcome of incident) were included.

Exclusion criteria: Cases with contact with objects, neck compression, sharp force (knife, gunshot) injuries, bite marks, sexual assaults and thermal mechanisms and fall from heights were excluded.

RESULTS

Of 5341 iCFM case results screened from the query design search, 1194 were expert opinions for the period November 2012 to August 2020. Of 1194 expert opinions, 471 were expert opinions for physical assaults (incident type).

Results were classified as:

1. **Survivor characteristics**:
   - *Demographic*
   - *Interpersonal*
   - *Incident*
   - *Clinical*
2. **Injury patterns:** Injuries were described as per location and injury type/nature.
   - *Location* was expressed as facial, head, back and chest, upper extremities, and lower extremities.

- *Injury types* were hard structure-related (fractures) and soft structure-related (e.g., abrasions, bruises, tenderness, swelling lacerations, discoloration, and pain).

3. **Medical service requirements:** Medical care requirements were described under:
    - Hospital admission/care
    - Imaging type
    - Surgical intervention

SURVIVOR CHARACTERISTICS

Demographic characteristics

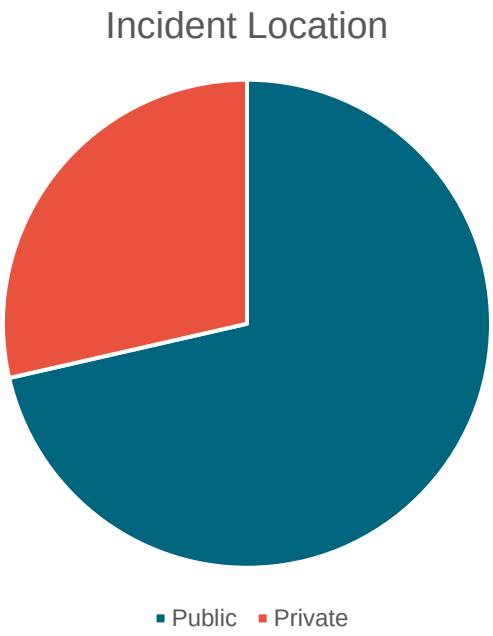
- Survivors were predominantly males (87% males).
- median age was 34 years (range 16-83 years).

Interpersonal characteristics

- Survivors were unknown to their perpetrators in 48% of cases.
- Survivors were known to their perpetrators in 29% of cases. Known relationship types were acquaintances, work relationship, housemate, familial and intimate partner.
- Interpersonal data was unavailable in 23% of cases.

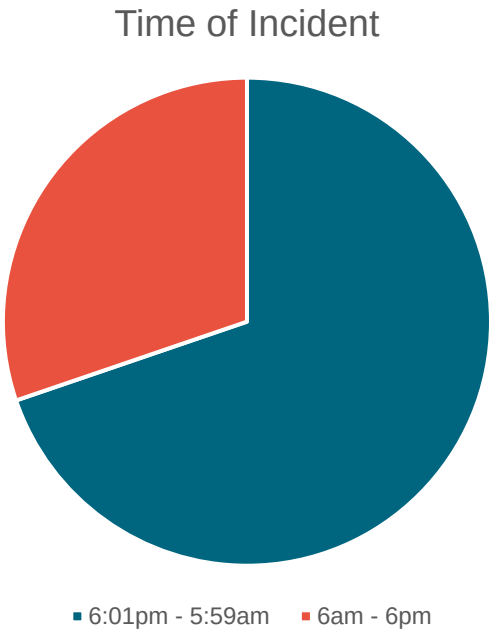
Location

- 64% of survivors were assaulted in public locations. Public locations included the street, hotel, bar, nightclub, karaoke lounge, casino, public transport bays or statins, beach, shops, park, and football ground.
- 26% of survivors were assaulted at private venues. Private venues included residential, prison, worksite, and school.
- Location data was unavailable in 10% of cases.



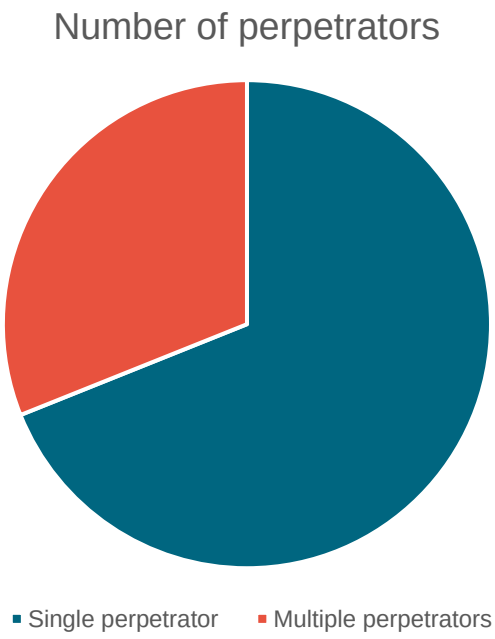
Time of the day

- 55% of the survivors were assaulted between 6pm to 6am.
- 24% of survivors were assaulted during 6 am- 6pm.
- Missing data was observed in 21% of cases.



Number of perpetrators:

- The majority of the survivors were attacked by single perpetrator (65%).
- 29% of survivors were attacked by multiple perpetrators.
- Data was unavailable in 6% of cases.



CLINICAL CHARACTERISTICS

Substance use

There were data limitations for this variable.

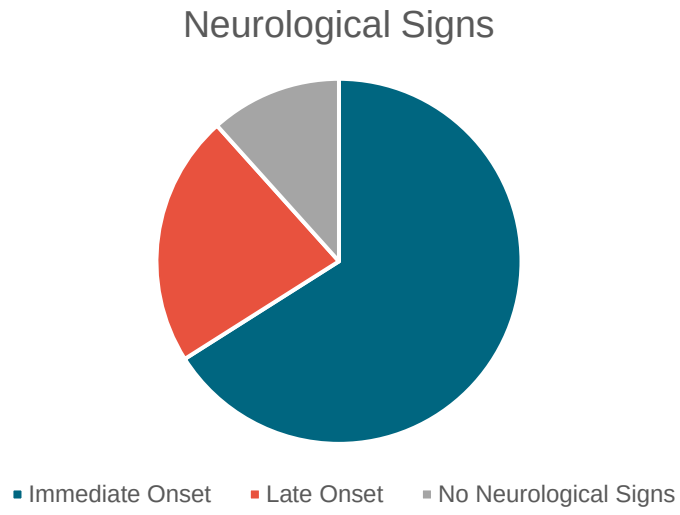
- In 70% of the case records, substance use was not stated.
- 28% of cases reported substance use.
- Alcohol intoxication was recorded in 22% cases.

Injury mechanisms: Type 1 cases were marginally more in numbers than type 2 cases.

- 57% of the survivors were *Type 1* cases, i.e., there was secondary head impact against a hard surface after being punched to head.
- 43% were *Type 2* cases, i.e., the survivor was punched down to the ground and further hit on head through bodily force application. The survivor was incapacitated by the initial one punch that left him unable to defend themselves against additional inflicted trauma to head.

Neurologic Signs:

- Immediate onset of neurologic signs was reported in 68 (62%) of survivors.
- Late onset neurologic signs were reported in 23 (21%) of survivors.
- No neurologic signs were observed in 12 (11%) of survivors.
- Data was unavailable in 6 (6%) of cases.



INJURY PATTERNS

Type of injuries included fractures, epistaxis (nosebleed), abrasions, bruises, tenderness, swelling, laceration, discolouration, and pain. Most injuries were to the facial region followed by head.

- **Facial injuries:**
  - 45% of the survivors had facial fractures.
  - 67% of the survivors had abrasions, bruises, tenderness, swelling, periorbital hematoma (black eye), laceration, discoloration, and pain.
  - 11% suffered from nose bleeds.
- **Head injuries:**
  - Cranial fractures were observed in 89% of survivors.
  - 30% had abrasions, bruises, tenderness, swelling, lacerations, discolorations, or pain.
  - 24% of survivors had intracranial hematoma.
- **Back or chest injuries:**

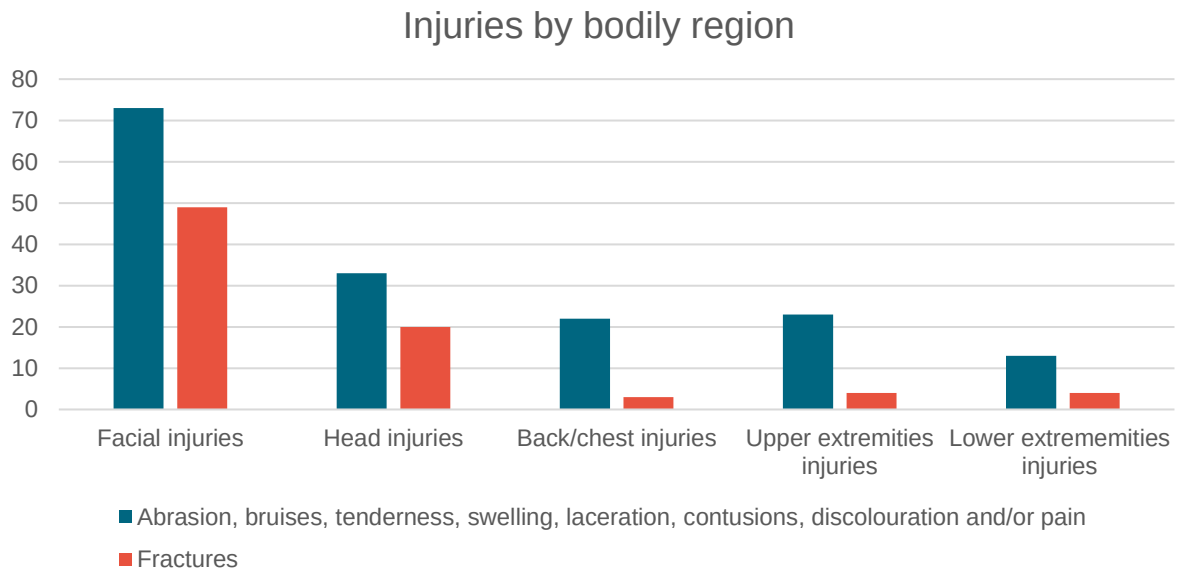
- Abrasions, bruises, tenderness, swelling lacerations, discoloration or pain was observed in 20% of survivors.
- <5 survivors had fractures of ribs or back.

➢ **Upper extremity injuries**

- Abrasions, bruises, tenderness, swelling, lacerations, discolorations and pian in 21% of survivors.
- <5 survivors suffered upper extremity fractures.

➢ **Lower extremity injuries**

- Abrasion, bruises, tenderness, swelling, laceration, discoloration, pain, and thrombosis was seen in 12% of survivors.
- Fractures were observed in <5 survivors.



MEDICAL SERVICE NEEDS

Medical care was required in 104 or 95% of survivors.

Hospital services: 90% of survivors required hospital care.

- 44% of survivors requiring hospital care were injured by *Type 1* injury mechanism (punch and ground hit).
- 46% of survivors requiring hospital services were injured by *Type 2* injury mechanism (extended trauma after initial punch and ground hit).

Imaging type: Computed Tomography scans were done in 71% of survivors. Five survivors required Magnetic resonance imaging and 23% required radiographs.

Surgical Intervention: Type of surgical interventions were lifesaving, (e.g., craniectomy to relieve raised intracranial pressure) and or reconstructive surgeries, and intubation. Prolonged intensive care unit stay, sutures/staples, antibiotics and medication, and physiotherapy and general practitioner consultations for the post-surgical period. Data was not available consistently for disaggregation into these categories.

FATALITIES INVOLVING ONE PUNCH ASSAULTS IN AUSTRALIA: AN UPDATE

SUMMARY

The concerted effort towards prevention of one punch assaults appears to be working, with a decline in deaths since 2012, and positive improvements in the previously highlighted risk factors: young men, drinking alcohol and licenced venues at the weekend. However, this new data now demonstrates that at least 170 Australians have lost their lives to a one punch assault since 2000. More needs to be done to curb these preventable deaths and the impact they have on the Australian community.

RESEARCH QUESTION

What are the trends and characteristics of one punch fatalities in Australia since 2012? Have we seen a change in the number of deaths and the characteristics of these cases?

METHODS

Study design: This was a descriptive retrospective study of Australian coronial cases involving a one punch assault since 2012.

Data source: *National Coronial Information System (NCIS)* database; an online storage and retrieval system for all deaths reported to a coroner in Australia since 2000 www.ncis.org.au

Query design: A Query Design search was conducted to retrieve of all cases on the NCIS between 1st January 2012 and 31st December 2019 classified as *assault by a person*. Only completed cases no longer under investigation by the Coroner as of the search date 5 March 2021 were included. Given the delay in case closure for criminal cases such as fatal assaults, only cases occurring up until end of 2018 were included, providing a 3-year interval to ensure a more complete dataset.

A manual review of all 304 cases was undertaken to examine the coronial findings, police narrative of death circumstances and autopsy report. Additional information was collected from the coronial findings including the time and day of the incident. Toxicology results were also collected, including the specimen site and collection time (antemortem or postmortem).

Inclusion criteria:

- *Type 1:* Individual was assaulted with a single punch to the head or face, sending them falling to a hard surface (usually the ground) and striking their head, not regaining consciousness.
- *Type 2*: Individual was assaulted with a single punch to the head or face, sending them falling to a hard surface unconscious, followed by a small number of subsequent strikes shortly after the 'coward punch'.

Exclusion criteria:

- Assault involving the use of a weapon
- Assault involving a punch/hit to the head or face but with no subsequent fall to a hard surface with head impact

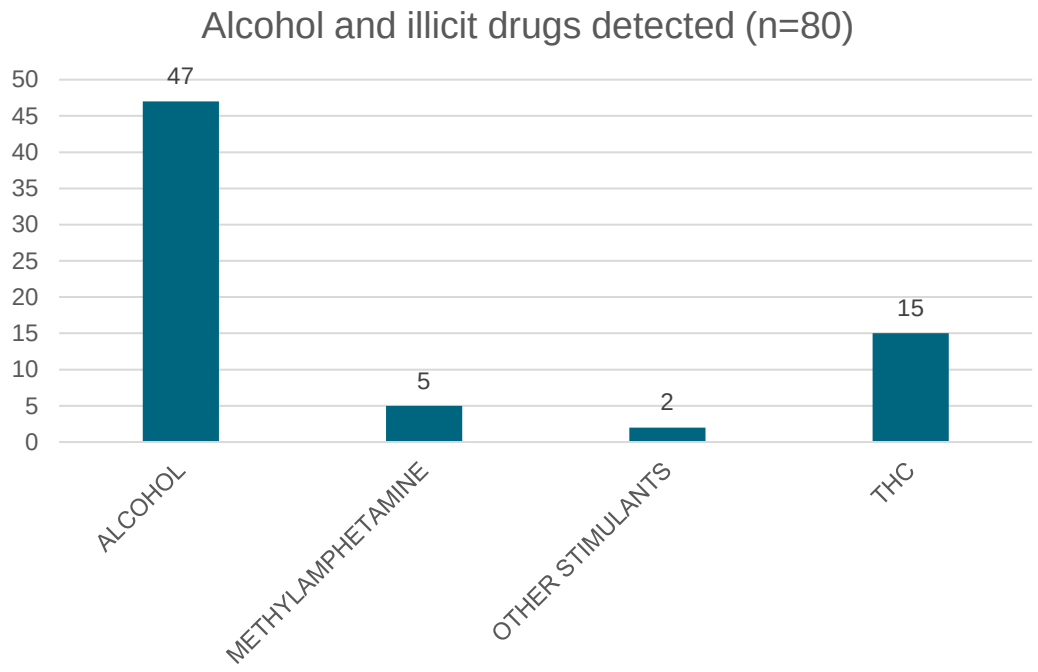
RESULTS

DEMOGRAPHICS

- 61 *Type 1* cases and 19 *Type 2* cases
- Almost exclusively males (<5 females)
- Age ranging from 18-71 years with a median of 43.5 years
- Overall, the perpetrator relationship indicated the same number of known individuals to strangers (47.5% each).
- There was a decreasing trend in cases over the period from 2012 (13 cases) to 2018 (6 cases).

SUBSTANCE USE

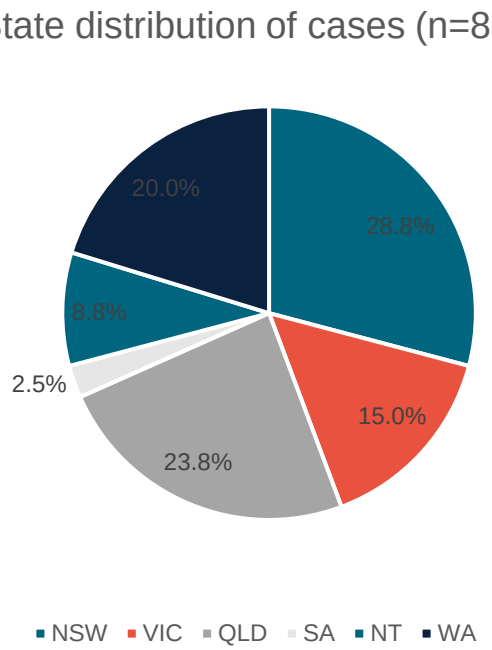
- Alcohol was the most common drug, detected in 66.2% of 71 cases where toxicology was conducted. The median alcohol concentration detected in antemortem and postmortem samples was over three times the legal driving limit, 0.167% BAC, ranging from 0.005% to 0.327% BAC. Only 6 alcohol positive cases involved a concentration below 0.05g/100mL.



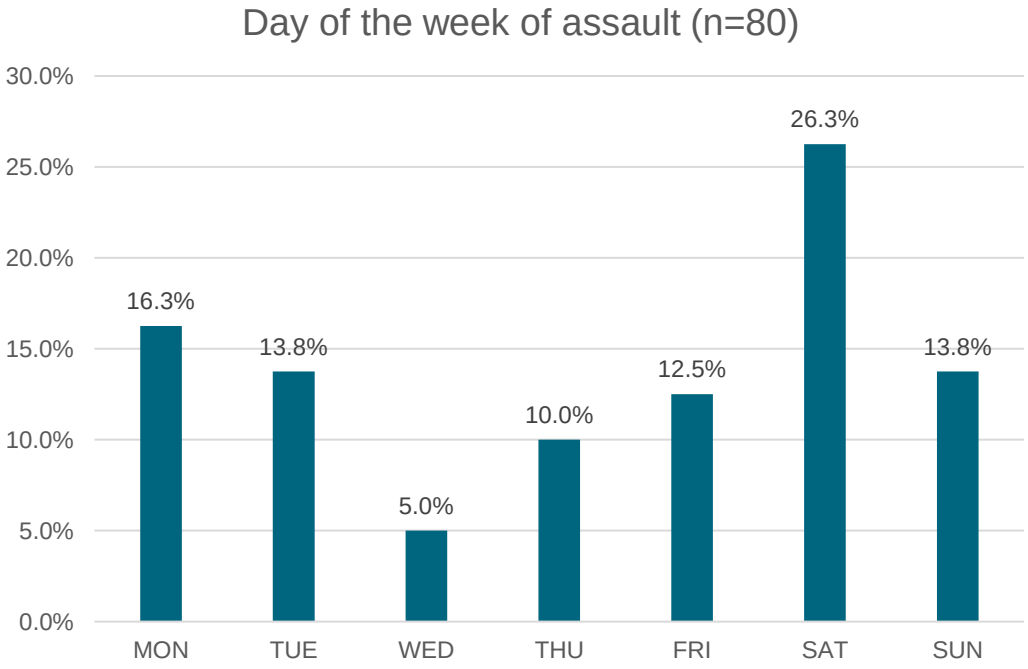
- Five deaths reported methylamphetamine, with THC more commonly detected at a rate of 21.1%. No other drugs of clinical significance were detected. Alcohol was co-detected with illicit stimulants (cocaine, MDMA or methylamphetamine and metabolites) in 6 cases and with THC or its metabolites in 7 cases.

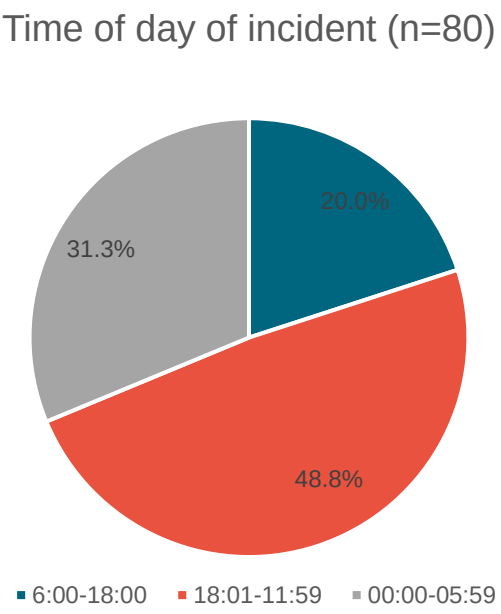
TIME AND LOCATION

- The highest proportion of cases overall were seen in NSW (28.8%), followed by Queensland (23.8%) and WA (20%).

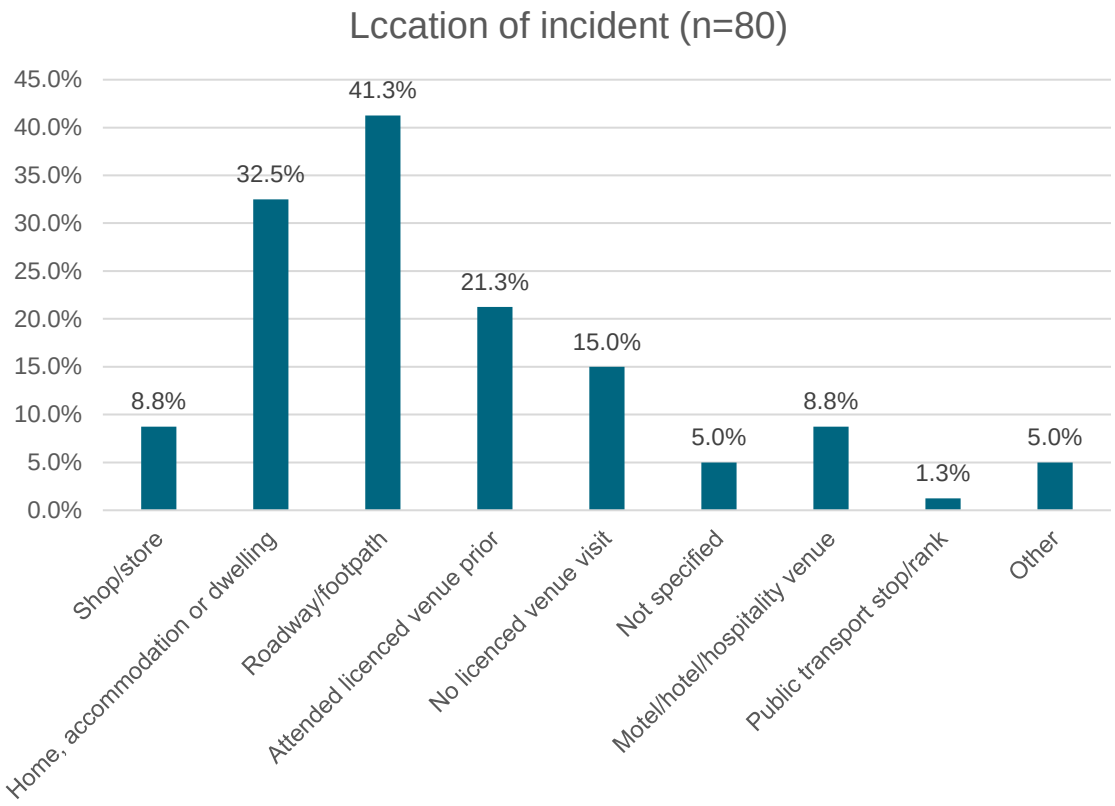


- More assaults occurred on a weekday (57.5%) than a weekend. However when broken down by day, Saturday incurred the highest proportion of assaults compared with any other day (26.3%).





- The majority of assaults occurred between 6pm and midnight (48.8%), followed by the period of midnight until 6am. The fewest number of cases occurred between 6am and 6pm (20%).
- Only 8.8% of deaths occurred in hotels, bars or other licenced venues. However, 34 deaths (41.3%) occurred on a footpath or roadside, of which 17 (21.3%) had been at a licenced venue immediately prior.
- When location of the assault was divided into those where alcohol was and was not involved (i.e. the person had or had not being drinking prior to death), the difference was more obvious, with 30% of cases involving alcohol consumption at a location prior to death and 62.5% not, according to all information available in the coroners findings.
- 63.8% occurred in metropolitan locations, compared to 36.3% in regional areas.
- Nearly a third of deaths occurred in a home or other accommodation. Of these, none involved an intimate partner; most involved a friend or housemate (n=14) or non-partner family members (n=7).



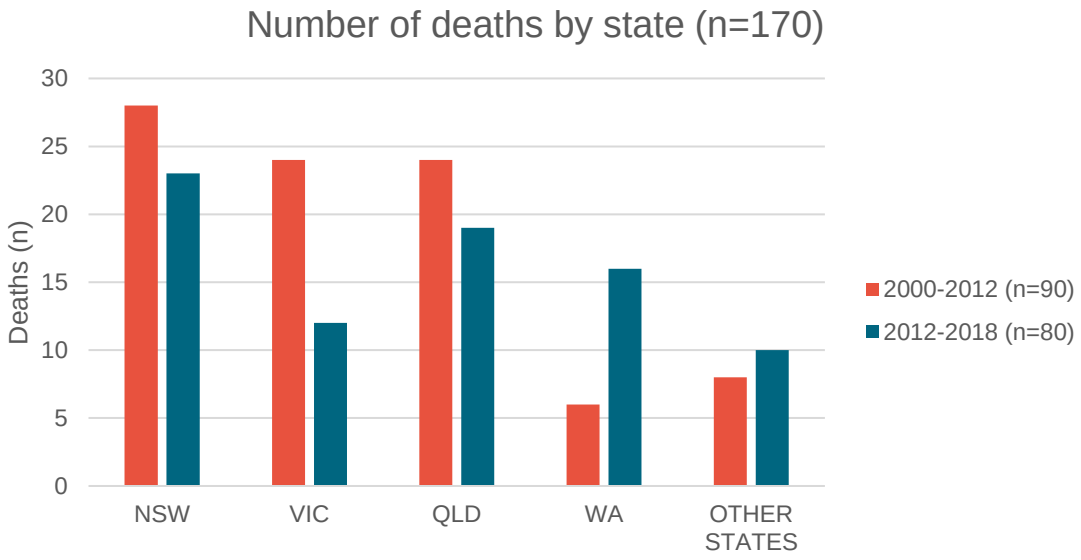
PATHOLOGY FINDINGS

The neuropathological findings fell into three distinct categories:

1. Cases where neurological injury was primarily due to an accelerated impact with the ground, with consequent injuries including skull fractures, subdural and subarachnoid haemorrhage, contusions, and subsequent hypoxic-ischaemic changes (n=52, 65%). This group was associated with a high rate of aggressive neurosurgical intervention.
2. Cases demonstrating traumatic basal subarachnoid haemorrhage due to vertebrobasilar artery/branch laceration (n=52, 65%). Neurological injury in these cases for the most part was due to the initial impact, rather than contact with the ground.
3. Cases where death was consistent with commotio cerebri/medullaris syndrome (n=9, 11.25%). In these cases, cranial impact in association with alcohol intoxication precipitated cardiorespiratory arrest. It is less clear whether the initial impact, or the subsequent impact with the ground, precipitated cardiorespiratory arrest.

THEN AND NOW: 2000-2012 VS 2012-2019 DATA

- Our data shows at least 170 Australians have lost their lives to a one punch assault since 2000.
- The median age was 43.5 (range 18-71) years, demonstrating a drop in younger victims (previously 33 years).
- New South Wales and Queensland were again the jurisdictions reporting the highest proportion of cases (28.8% and 23.8%, respectively), however there was a decline in Victorian cases from 27% to 15%, and a rise in cases from Western Australia, from 7% to 20%.

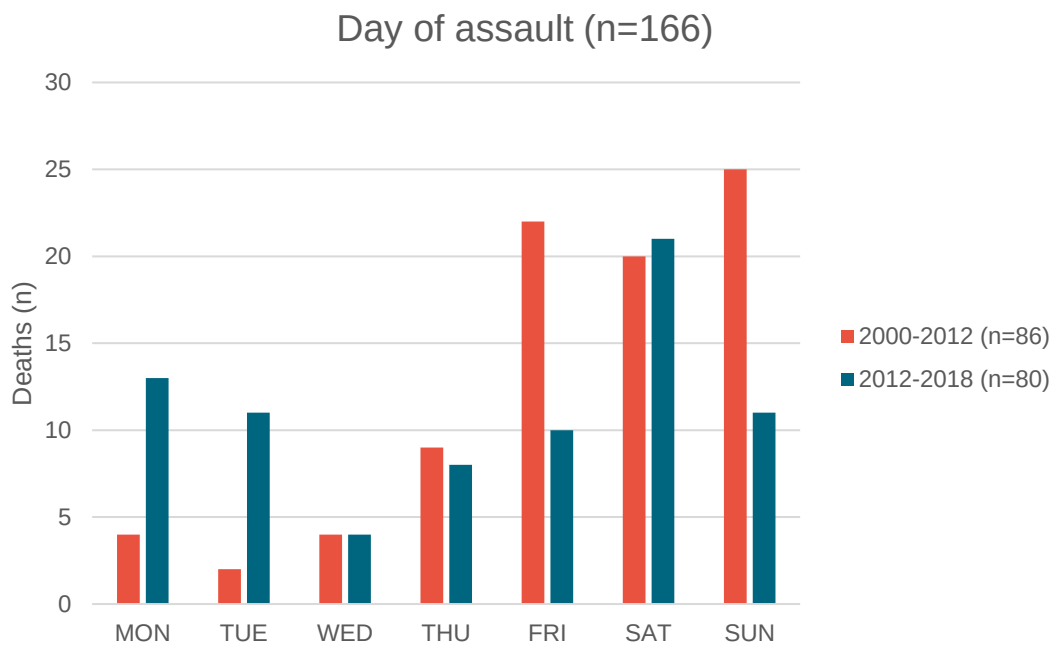


'Other states' include Tasmania, Northern Territory and South Australia which each had <5 cases each.

- Alcohol is still the most commonly detected drug among one punch deaths in Australia.
    - Of the 71 cases where toxicology results were available, alcohol was detected in 47 cases (66.2%) (with an additional case where alcohol intoxication was reported but an appropriate sample for testing was not available).
    - While this is less than the previous study's finding of 73%, the median alcohol concentration was the same: 0.14 and 0.19 g/100mL in antemortem and postmortem samples, respectively (range 0.005-0.32g/100mL), demonstrating a very high degree of usage reflecting likely disinhibition and inability to properly protect themselves from an assault.

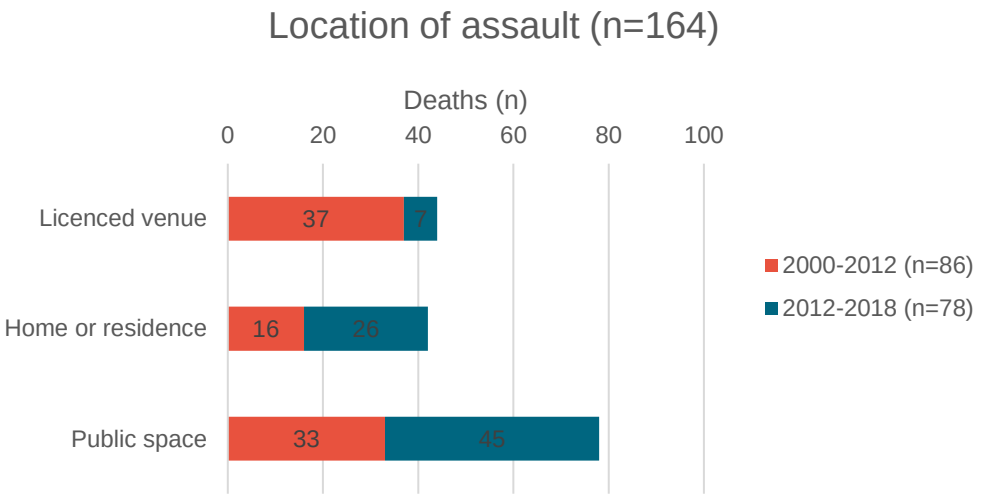
- Only 5 deaths reported methylamphetamine, with THC more commonly detected, indicating no significant change in the detection of illicit drugs in the pre-2012 and post-2012 data.

- In our previous study, the majority of deaths occurred on a weekend (52.3%), however the new data indicated a shift towards weekday assaults, with 57.5% occurring between Monday and Friday.
  - Saturday still incurred the highest proportion of assaults compared with any other day, representing a quarter of all cases (26.3%).
  - Of the cases occurring on a Sunday (n=11), only 5 occurred in the early hours of the morning (i.e. “Saturday night”). Of the cases occurring on a Monday (n=13), only 4 occurred in the early hours of the morning (i.e. “Sunday night”).



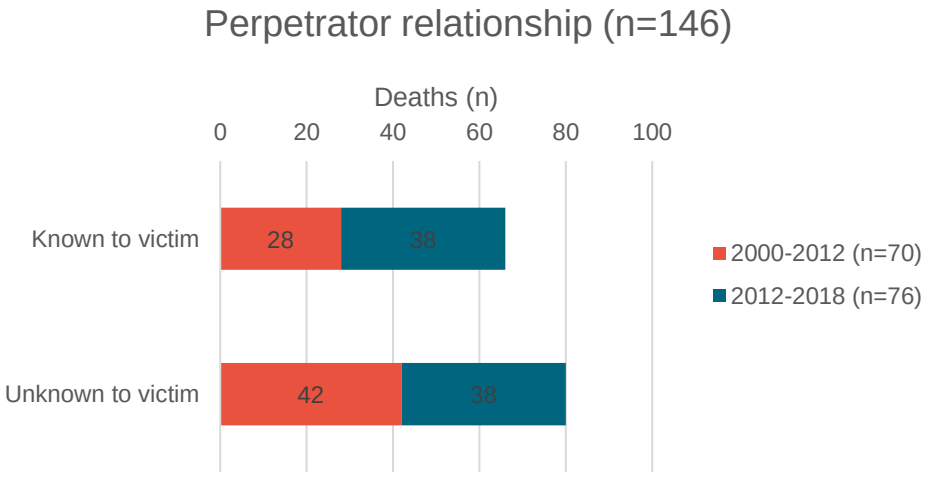
*4 unspecified in 2000-2012 cohort

- The drop in deaths occurring in licenced venues was noteworthy; only 8.8% of deaths occurred in hotels, bars or other licenced venues, compared with 41% in our previous study. However, 33 deaths (41.3%) occurred on a footpath or roadside, of which over one fifth had been at a licenced venue immediately prior.



*Public space includes footpaths, public transport, sport clubs, schools; 4 unspecified in 2000-2012 cohort, 2 unspecified in 2012-2018 cohort.

- Only 18% of deaths occurred in a home or other accommodation in the pre-2012 data; a figure which rose to 32.5% in the current dataset. Of these, none involved an intimate partner; most involved a friend/housemate or non-partner family members.



*20 unspecified in 2000-2012 cohort; 4 unspecified in 2012-2018 cohort.

RECOMMENDATIONS

There is no single approach to preventing social violence in Australia. Successful strategies to prevent one punch assaults must involve a combination of measures that are tailored to the characteristics and risk factors identified in the growing evidence base. Recommendations arising from this research program are as follows:

- *Education and awareness (one punch violence):* The decline in fatal one punch assaults following the nationwide education and awareness campaigns since 2014 indicate that this is one of the most successful strategies to prevent one punch assaults. Australians now know that one punch can kill. Future campaigns should continue to target the demographics identified as highest risk to perpetrate or become a victim of a one punch assault; that is males, aged between 25 and 45 years.

- *Education and awareness (alcohol):* While the data showed a positive trend in the number of one punch assaults occurring at licenced venues in recent years, the use of alcohol remained consistent in both victims and perpetrators across the entire study period. This demonstrates the continued need to provide training to licensees, bar staff and security on the responsible service of alcohol and managing intoxicated or aggressive patrons.

- *Legislation:* The low proportion of perpetrators charged on specific one-punch laws, comparative to manslaughter and murder, highlights the potential ineffectiveness of these laws specifically intentioned to convict one punch perpetrators. Future reforms of legal responses to one punch assaults must be evidence-based and preferably involve consultation with relevant community members, judicial officers and legal counsel, and police, who have been involved in the delivery of these laws to date.

- *Research:* This study revealed the impacts on survivors and perpetrators, as well as the fatal consequences of one punch assaults. Research exploring the significant social and financial costs to the community, including the impacts on the services required to support survivors, is necessary to inform future prevention strategies and garner community support for implementation and engagement.

- *Resources:* The evidence-base on perpetrators who commit violent crimes, such as one punch assaults, is extremely limited, in large part due to the absence of a relevant database. Identifying the risk factors for offending is arguably the best approach to informing targeted prevention strategies in the long-term. Thus, the development of a database of perpetrators, akin to the National Coronial Information System's database of victims, would be incredibly beneficial towards the prevention of one punch assaults and other forms of social violence.