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Examination of hospital stays due to family and domestic violence

2010–11 to 2018–19

AIHW

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Summary

Each year, there are around 6,500 hospitalisations for injuries known to be related to family and domestic violence (FDV) – encompassing violence that occurs between family members, and violence that occurs between intimate partners (AIHW 2021d). Through the use of longitudinal, national linked hospital and death data from the National Integrated Health Services Information Analysis Asset (NIHSI AA), this project examines, in detail, FDV hospital stays (defined as continuous periods of acute care hospitalisation) that occurred from 2010–11 to 2018–19, including the number of repeat stays, length of time between stays, injuries, diagnoses and the relationship of perpetrator to victim. For this population, it also examines hospital stays for other types of assault, hospital stays for any reason (all cause hospital stays), emergency department presentations and deaths.

To assist with interpretation of the results, analyses are also presented for a comparison group of people who had a hospital stay in the period (matched on age, sex, Indigenous status, year of contact and remoteness area). The comparison of these 2 groups enhances the understanding of the hospital interaction profile for those who experience FDV, those who are at risk of further hospital stays, and the identification of potential undisclosed cases of FDV.

This work increases understanding in how linked data, like the NIHSI AA, can be used to examine service use and outcomes for people experiencing FDV, including the possible role this analysis can have in informing potential service intervention opportunities.

This report examined public hospital data for all Australian jurisdictions except Western Australia and the Northern Territory over the period 2010–11 to 2018–19. The FDV group is anyone who had a FDV stay from 2010–11 to 2017–18, but analysis includes stays that occurred in 2018–19. Over this time period, there were 34,416 hospital stays due to FDV.

Around 29,000 people had at least one FDV hospital stay from 2010–11 to 2017–18

Of these, 2 in 3 were female (68%) and 1 in 3 were male (32%).

Most (67%) were aged between 15 and 44 at their first FDV hospital stay:

- 1 in 5 were 15–24 (21%)
- 1 in 4 were 25–34 (25%)
- 1 in 5 were 35–44 (21%).

Aboriginal and Torres Strait Islander people were over-represented among those who had a FDV stay; 28% (or 8,232) of those with at least one FDV stay were Indigenous compared with around 3.3% of the Australian population (estimate as at 2016)(ABS 2018).

Around 1 in 8 (3,590 or 12%) people with a FDV hospital stay, had more than one stay, but this varied by population group

People with repeat FDV hospital stays made up a small proportion of those with FDV stays; most people (88%) who had a FDV stay, had only one. However, this varied by sex and Indigenous status:

- Indigenous people were more likely than non-Indigenous people to have more than one FDV hospital stay (20% and 9%, respectively).
- Females were more likely than males to have more than one FDV hospital stay (14% and 9%, respectively).

Other assault hospital stays were higher among the FDV group than among the comparison group

The FDV group experienced 5,500 other assault hospital stays (that is, in addition to their FDV assault hospital stays) in the 8 years to 2018–19. Around 1 in 5 (21%) had multiple assault hospital stays (including both FDV and other assault).

Most (73%) other assault hospital stays for the FDV group had an 'unspecified' perpetrator. It is possible that some of these assaults could be due to unidentified FDV.

Head injuries were the most common type of injury leading to a FDV hospital stay

Over half (51%) of FDV hospital stays had a head injury recorded as the first injury within the hospital record (some records have several injuries). This might in part reflect the inherently serious nature of head injuries compared with other types of injuries. The next most common first injury recorded within a hospital stay were injuries to the abdomen (7.5%) thorax (7.5%) and wrist and hand (6.6%). These 4 categories account for 73% of all first injuries of FDV hospital stays. These data refer to the first recorded injury within a hospital stay. However, over half (53%) of FDV hospital stays had multiple injuries recorded.

Repeat FDV hospital stays most commonly occurred within 1 year, but some people experienced several years between stays

Overall, among those who experienced multiple FDV stays, most experienced an additional stay that occurred within 1 year (62%). However, there was also a clear relationship between length of time available in the measurement period, and length of time between additional stays. That is, some people with longer follow-up periods demonstrated several years could occur between identified FDV hospital stays.

Partners were responsible for most FDV hospital stays and most repeat hospital stays

Partners were recorded as the perpetrator for 62% of FDV hospital stays, other family members for 29% and parents for 10% (note these do not add to 100% as a single hospital stay can have multiple perpetrators recorded). Females were more likely to have a hospital stay due to a partner (76% of stays) than males (30% of stays), while males were more likely to have a hospital stay due to 'other family member' (55%) than females (18%).

Partners were most likely to be responsible for repeat FDV hospital stays; among the total 3,590 people who had a repeat FDV stay, 2,800 had at least one FDV stay due to a partner. Of these 2,800, 87% had at least one additional stay due to a partner (the remainder had a repeat due to either a parent or other family member).

People who had a FDV hospital stay had a greater number of (acute care) hospital stays, and their principal diagnoses were more varied, than the comparison group

People who had a FDV stay, had 8 hospital stays, on average, compared with 5 hospital stays among the comparison group. The most common principal diagnosis among the FDV group was *Injury and poisoning* (51% of which were FDV associated). Among the comparison group, the most common principal diagnosis was *Persons encountering health services for specific procedures and health care*. This includes treatments such as dialysis.

About 1 in 10 hospital stays among the FDV group were for *Pregnancy, childbirth and pureperium*, highlighting the risks to mothers of this type of violence. Hospitalisation for *Mental and behavioural* conditions was relatively more common among the FDV group (11% of all hospital stays) than the comparison group (4%), also highlighting the important connections between FDV and poor mental health.

People who had a FDV hospital stay had more ED presentations on average than the comparison group

Almost 9 in 10 (87%) of the FDV group had at least one emergency department (ED) presentation (which did not lead to a hospital admission), compared with 7 in 10 (72%) of the comparison group. The FDV group were also more likely to have multiple ED presentations (87% compared with 73%). People with 3 or more FDV stays were the most likely to have had 10 or more ED presentations (53%). From the national data, it cannot be determined whether any of these presentations were FDV-related

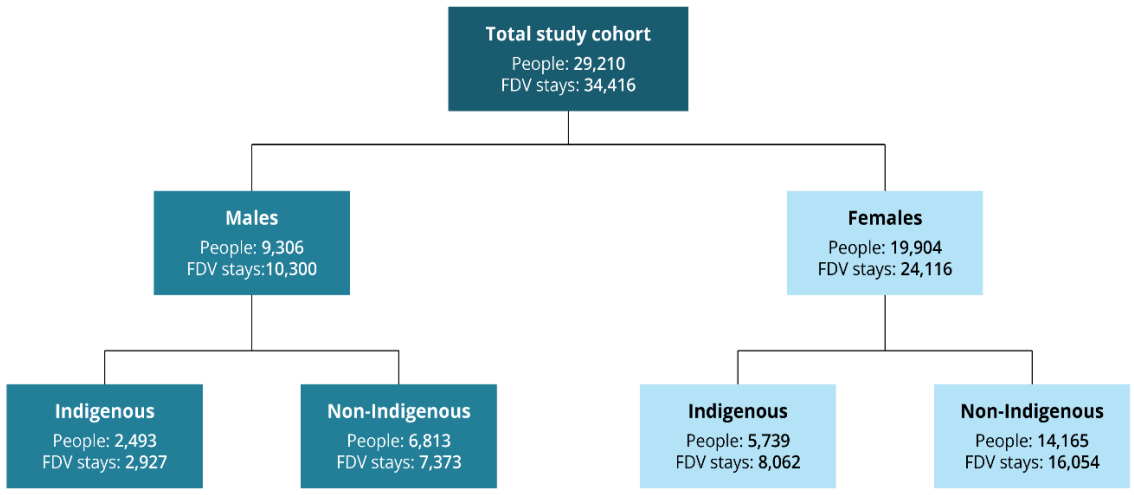
People who had a FDV hospital stay had a higher rate of death, and different causes of death, when compared with the comparison group

Of the FDV group, 5.7% had a death recorded from 2010 to 2019, compared with 4.4% of the comparison group. The cause of death for these groups also varied. The leading causes of death among the FDV group (where a cause of death was listed) were coronary heart disease, accidental poisoning, suicide and liver disease. The leading causes of death for the comparison group were coronary heart disease, lung cancer and cerebrovascular disease.

When examining the rate ratios, the FDV group were 10 times as likely to die due to assault, 3 times as likely to die due to accidental poisoning or liver disease, and 2 times as likely to die due to suicide, as the comparison group.

This report uses the term 'hospital stay' which refers to a continuous period of acute care hospitalisation and may be made up of one or more acute care 'hospital separations' (see Figure 2.1 for more information).

Figure S1: Number and demographics of people with at least one FDV hospital stay, 2010–11 to 2018–19



Note: The FDV cohort includes people who had a FDV stay from 2010–11 to 2017–18. Analyses include FDV stays that occurred from 2010–11 to 2018–19. Data for Western Australia and the Northern Territory were not available for analysis.

1 Introduction

Defining family and domestic violence

This report uses the broad term family and domestic violence (FDV), which covers violence that occurs between family members and violence that occurs between intimate partners.

FDV may be physical, sexual or psychological in nature, and have lasting physical and mental impacts on the individual (Loxton et al. 2017a). It typically occurs where a person exercises power and control over another person. It may be perpetrated by a parent, partner, sibling, or other person considered family, including extended family and kinship relationships.

FDV is a major health and welfare issue and the drivers of FDV are complex. Contributing factors include financial pressures, alcohol and other drug abuse, mental illness, and social and economic exclusion (Capaldi et al. 2012).

FDV affects people of all ages and from all backgrounds, but mainly women and children. Despite this, where possible, throughout this introduction, data and background information, is included for both males and females. However, due to relatively small estimates with high standard errors in some sources, presentation of data for males is not always possible. However, the analyses of administrative hospital data, which is the focus of this report, are included for both males and females.

Prevalence of family and domestic violence

Data from the 2016 Australian Bureau of Statistics (ABS) Personal Safety Survey show around 1 in 6 (17%, or 1.6 million) women and 1 in 17 (6.1%, or 548,000) men had experienced physical or sexual violence from a current or previous cohabiting partner since the age of 15 (ABS 2017). Around 2.3% (211,700) of women aged 18 and over experienced intimate partner violence (broader than just those cohabiting) in the 12 months prior to the survey.

Published prevalence data relating specifically to family violence are limited (that is, violence that occurs between family members, distinct from intimate partner violence). However, data are available on experiences of abuse before age 15 by any adult (which includes a person's parents); 1 in 6 (1.5 million) women and 1 in 10 (991,600) men aged 18 and over, experienced physical and/or sexual abuse before age 15.

Impacts of family and domestic violence

The health and welfare impacts of FDV are well known. The 2018 Australian burden of disease study found that partner violence contributed to 1.4% of the total disease burden in Australian women and was causally linked to homicide and violence, suicide and self-inflicted injuries, alcohol use disorders, depression, anxiety and early pregnancy loss (AIHW 2021a). In 2019, intimate partner violence contributed to almost 20% of the burden of suicide and self inflicted injuries among females (AIHW 2021f). Similarly, the 2011 *Examination of the burden of disease of intimate partner violence against women* report found that experiencing FDV is associated with ill health and premature death among women in Australia aged 18 to 44 (Ayre et al. 2016). Longitudinal Australian research has shown that, over a 16 year follow-up period, women who ever lived with intimate partner violence were more likely to report poorer

mental health, physical function and general health and higher levels of bodily pain, than those who had not lived with intimate partner violence (Loxton et al. 2017a). Similar data are not currently available for males.

In addition to the direct health impacts, people who experience family and domestic violence are at increased risk of financial difficulties, homelessness or risk of homelessness, social and economic isolation and exclusion. For example, according to the Personal Safety Survey, 1 in 11 women and 1 in 25 men who experienced violence from a current partner took time off work as a result (ABS 2017). When examining violence from a previous partner, this increased to 1 in 5 women, and 1 in 6 men. Among people accessing specialist homeless services, the most common reason for seeking services was FDV (AIHW 2020d).

Severe (and repeated) instances of FDV can result in death. In 2018–19, there were 77 domestic homicides. Of these, 48 were due to intimate partner violence, with women being almost 3 times as likely as men to have died due to intimate partner violence (note these data do not include the Australian Capital Territory). The remaining 29 domestic homicides were due to filicide, parricide, siblicide and other family members. Since 1990, women were between 2 and 6 times as likely to be killed due to intimate partner violence as men (Bricknell & Doherty 2021 2021). As FDV has been shown to escalate in seriousness over time, FDV deaths likely represent cases of repeat partner violence. Research from the Australian Domestic and Family Violence Death Review Network found that of 105 domestic homicides involving female victims, most perpetrators had previously used physical violence against the victim (ADFVDRN 2018). Therefore, early identification and intervention in FDV cases may aid in reducing repeat FDV events and the associated severe consequences.

Identifying repeat family and domestic violence

FDV can be characterised by a pattern of abuse. This abuse may be physical, psychological, social or sexual in nature, and often, the frequency and severity of abuse escalates over time. Research using police data shows previous FDV offending is a predictor of future FDV offending, and that perpetrators escalate in seriousness and frequency, with each additional FDV event (Boxall & Morgan 2020). Using police data, the risk of re-victimisation within 12 months has been shown to be associated with living in lower socioeconomic or inner regional areas, emotional abuse (controlling or attempting to control contact with family, friends or community), low educational attainment and having a disability (Rahman 2018).

Data on repeat family violence in Australia from the perspective of the victim are currently limited. Existing research includes self-reported experiences of FDV in the Personal Safety Survey, the Australian Longitudinal Study on Women's Health, and analysis of police offender databases (ABS 2017; Boxall & Morgan 2020; Loxton et al. 2017b).

According to the ABS' Personal Safety Survey, over 1 in 2 (54%) women and 2 in 3 (65%) men who experienced violence by their current partner experienced more than one event (ABS 2017). From these data it appears that men are more likely than women to experience multiple events, however, once the level of sampling error is taken into account, these figures are not significantly different, and therefore the difference between the reported estimates should be interpreted with caution. When looking at data relating to a previous partner, around 68% of women, and 61% of men, experienced more than one event (these differences are statistically significant).

Analysis of linked data, which can provide insights on the pathways of people experiencing FDV and their longer-term outcomes, also provides an opportunity to better understand the patterns of FDV over time.

Services responding to family and domestic violence

In addition to national survey data, some national service-level data are available to provide additional information on the nature and extent of FDV, and the service responses for those affected. Hospitals are just one of a broad range of services that respond to FDV, including specialist services, mainstream health and welfare services, justice services, and resource and advocacy services (Table 1.1). The type of interaction victims and/or perpetrators have with these services varies according to the service aims, as does the national collection and consistency of data related to FDV.

However, even where national service-level data related to FDV are collected, it is important to note that these data will not represent the complete picture, due to a number of reasons. For example, people who experience FDV:

- do not always seek assistance – only half (54%) of women who experienced current partner violence sought advice or support (ABS 2017)
- may seek assistance but may choose not to disclose their experience of FDV – or their disclosure may not be considered FDV due to lack of recognition and understanding among staff of what constitutes FDV (for example, coercive control and psychological abuse) (New South Wales Health 2019b).

In recognition that improved identification of people experiencing FDV can support better intervention, advice and referral of clients towards services, most jurisdictions have implemented frameworks, guidelines and/or routine FDV screening programs (ACT Government 2019; Department of Premier and Cabinet 2017; Family Safety Victoria 2021; Government of Western Australia North Metropolitan Health Service 2020; New South Wales Health 2019a, 2019b; Department of Territory Families, Housing and Communities 2020; Office for Women 2021; Queensland Health 2020). For example, in New South Wales, FDV screening is required to be undertaken during routine assessments for women attending antenatal services, child and family health services, mental health services, and alcohol and other drug services (NSW Health 2019a). In addition to improving the support available to people experiencing FDV, these initiatives have the potential to improve the capture of FDV-related information in national collection systems in the longer-term, provided safety and/or privacy matters are appropriately considered.

Table 1.1: Services responding to family, domestic and sexual violence

Specialist FDSV services	Mainstream health and welfare service	Justice services	Resource and advocacy services
Crisis helplines and counselling services	Specialist homelessness services *	Police *	Specialist family and domestic violence advocacy service (e.g. court advocacy service)
Specialist family and domestic violence services ^	Child protection*	Courts *	
Specialist family and domestic violence legal services ^	Family and relationship services	Legal aid/Community legal services ^	
	Government crisis payments (Services Australia)		
	Alcohol and other drug treatment services		
	Health services (including primary care, mental health, ambulance, hospitals (admitted care*; emergency care; and outpatient care)		
	Financial counselling services		

FDSV family, domestic and sexual violence

* National data are collected, including data related to FDV, although comparability between jurisdictions may vary. Note that in the national child protection data it is not possible to identify 'family violence' or 'exposure to family violence' separately. Courts data include experimental FDV data.

^ National work to develop and/or improve data related to FDV are underway.

With improved collection and/or identification of service responses related to FDV at a national level, and increased integration of Commonwealth and state and territory data, there will be greater understanding of the typical experiences of FDV including pathways through the health, welfare and justice systems, and longer-term outcomes.

Health and welfare systems

This section provides a brief overview of some of the national data relating to services accessed by those experiencing FDV. Additional service data are available to varying degrees within each state and territory and among non-government organisations, however, these data are not nationally comparable, and so, are not included here. Note that the data referred to here are de-identified data collated for statistical purposes to inform policies and system design and do not contain the personal details of people presenting for support.

Specialist homelessness services

People who experience FDV may seek assistance from specialist services designed to provide assistance with achieving safety and housing.

In recognition of this, data relating to FDV are collected and compiled in the AIHW's Specialist Homelessness Services Collection. In 2019–20, 41% (or 191,200) of specialist homelessness services (SHS) clients reported experiences of FDV (AIHW 2020d). The majority (91%) of these clients were women. Among the 191,200 SHS clients who experienced FDV, 7 in 10 were seeking SHS assistance directly related to their FDV experiences. Among younger clients, the proportion of FDV experiences was higher: 51% of SHS clients aged under 18 had experiences of FDV. Around 51,600 SHS clients

who experienced FDV presented to a specialist homelessness agency as a single parent with child/ren.

However, some people seeking SHS are victims of FDV, while others are perpetrators. The AIHW has undertaken initial work to help differentiate between these 2 types of clients (see Parliamentary inquiry into family domestic and sexual violence, submission 24; AIHW 2020f).

Child protection

Children exposed to, and who are victims of, family violence may come to the attention of state and territory child protection systems.

In 2019–20, 174,700 children received child protection services. Of these, 48,900 were subject to a substantiated notification of abuse or neglect, 72,000 were on a care and protection order and 56,500 were in out-of-home care (note these do not sum to the total as some children will have received more than one type of service) (AIHW 2021b).

Of children who were subject to substantiated notifications, emotional abuse was the most common primary type of abuse substantiated for children (54%), followed by neglect (22%), physical abuse (14%) and sexual abuse (9%),

Hospitals

Studies show that people who experience FDV have higher rates of health and hospital service utilisation, for a range of health conditions in addition to treatment directly related to injuries caused by FDV (Loxton et al. 2004; Rivara et al. 2007; Sherrard et al. 1994). Existing national hospitals data allow examination of the number of hospital separations due to FDV, where a person discloses they are the victim of assault, and where they specify their perpetrator as a partner, parent or other family member.

In 2017–18, there were around 6,500 cases of hospitalised FDV assaults in Australia (AIHW 2019b). However, these data only relate to admitted care, and therefore generally represent more severe cases.

This report enhances these data, using linkage techniques to count individual experiences, in addition to service-level interactions (for more information, see ‘Data and methods’).

Health and welfare system data gaps

At a national level there are very limited data from specialist FDV services, which include things like crisis services, or family and relationship counselling, family violence outreach services, and perpetrator intervention programs. The development of a national specialist family, domestic and sexual violence (FDSV) services data collection (‘prototype’) was announced in the 2020–21 Budget.

Primary care data (for example, general practitioner or GP) data are also currently limited. GP data would further enhance the national picture of the impacts of FDV, given GP contact is often the first point of call/entry to health treatment services, and where advice about violence is commonly sought; 1 in 3 females who sought advice about violence from a current partner, did so from a GP (ABS 2017). National funding for a trial to improve health system responses to family violence within select Primary Health Networks provides opportunities to consider the scope and nature of FDV data collected in primary care which would best meet community, government and service provider needs. In the longer term there could also be an opportunity to collect relevant information in the National Primary Health Care Data Asset, currently under development by the AIHW.

Despite these challenges, several jurisdictions in Australia have implemented domestic violence identification guidelines and/or screening tools to some degree in hospitals,

in an attempt to gain greater understanding of the number of clients with experiences of FDV, and to aid in intervention (Office for Women 2021; NSW Health 2019a, 2019b; Queensland Health 2018). However, there are limitations associated with these tools that are particularly pronounced in emergency department (ED) settings, including resource constraints, limited training among staff, and the potential lack of privacy from partners at presentation. Further, data collected via such screening tools are not routinely or nationally collated for analytical purposes.

Justice system

The criminal justice system is a set of laws and rulings that aim to protect members of the community and their property. Australia has 9 legal systems, comprising 8 state and territory justice systems, and one federal. Each jurisdiction's justice system contains police, court and formal supervision components (community and detention sentences). Through the administration of these systems, data relating to FDV may be collected and maintained by state and territory agencies.

Data from the legal system may represent police-recorded FDV incidents, formal charges with FDV offences, offenders and/or victims. The relationship between these elements is complex: a single FDV incident might relate to single or multiple victim/s, offence/s, and offender/s. Where police do not formally proceed with an investigation and/or lay charges, a police-recorded FDV incident may not be represented in data on victims, offenders or offences (which are sometimes only presented once the case is progressed).

Victims of FDV-related offences

Some data are available on victims of selected FDV-related offences (as recorded by police) through the ABS's *Recorded crime - victims* data. In 2020, there were around 10,600 victims of FDV-related offences for homicide and related offences, sexual assault and kidnapping/abduction (ABS 2021b). In addition, there were around 70,000 victims of FDV-related assaults (excluding Queensland and Victoria as data are not available for these jurisdictions).

FDV offenders

In addition to data on victims, some experimental data are available on FDV offenders through the ABS's *Recorded crime - offenders* data (ABS 2021a). There were 75,400 offenders proceeded against by police for at least one FDV-related offence in 2019–20. Around 4 in 5 offenders were male, and the median age was 33. The most common principal FDV offence was assault (52%), followed by breaching violence and/or non-violence orders (27%).

Justice system data gaps

As with most systems, a level of reporting or disclosure is required to identify FDV. Research shows that many FDV victims do not report to police. Studies estimate that between 20% and 50% of FDV victims report to police (ABS 2017; Birdsey & Snowball 2013). However, other family members may also report on the victim's behalf.

According to the 2016 Personal Safety Survey, for the majority of people who experienced partner violence, police were never contacted (ABS 2017). However, there was some variation by sex and partner status. The proportion of people who never reported experience of partner violence was:

- 82% for females and 97% for males (violence from current partner)
- 65% for females and 76% for males (violence from previous partner) (ABS 2017).

The barriers associated with reporting to police are well documented and include fear of not being believed or taken seriously, fear of negatively impacting the family or being expected to leave the perpetrator, a desire to protect, and economic dependence on, the perpetrator, privacy, fear of increased anger and escalation of violence and being physical obstructed from calling the police (Douglas 2019).

Conversely, the biggest predictor of a person reporting to police is a belief that their life is in danger (Barrett & St Pierre 2011).

Therefore, those cases reported to police are likely to be the more severe physical FDV events, where the perceived benefits of reporting to police outweigh the perceived negative outcomes, as outlined above.

As a result of these limitations, legal system data should be interpreted with caution, due to both state and territory legislative differences, and the complex relationship between when and how data are captured and recorded at each level of the legal system. In addition, each jurisdiction has differing practices for how data are presented and published. However, despite these challenges, nationally comparable data relating to offences is provided to, and published by the ABS.

The project

Through the use of longitudinal, national linked hospital and death data, this project examines, in detail, FDV hospital stays that occurred from 2010–11 to 2018–19, including the number of repeat stays, length of time between stays, injuries, diagnoses and perpetrator relationships to victims. For this population, it also examines other types of assault hospital stays, all cause hospital stays, ED presentations and deaths. Analyses are also presented for a comparison group (people who had a hospital stay (but not a FDV hospital stay) in the same 9-year period, and matched on age, sex, Indigenous status, year of contact and remoteness area) to assist with interpretation of the results.

Although FDV hospital data will relate to more severe (and mostly physical) experiences of FDV, it is the only national health service data that support the capture of nationally consistent coded information on the cause of the injury (for example, assault) and the perpetrator. When these data are linked, information at the person level (de-identified) can be determined and reported, in addition to the commonly presented episodes of hospital care (for example, see AIHW 2019a).

Additionally, given the serious nature of injuries that generally require a hospital stay, it is an important intervention point. Although intervention would best be served in the community prior to a person requiring hospital treatment, those who do have a FDV hospital stay can be at risk of further serious injury and death, given what is known around FDV escalation (Boxall & Morgan 2020).

The report enhances the evidence base and understanding of FDV in Australia, and has specific relevance to outcomes 4 and 6 of the *National Plan to Reduce Violence against Women and Children 2010–2022*:

- Outcome 4: *Services meet the needs of women and their children experiencing violence.* The presentation of demographic and hospital stay profiles of those experiencing FDV can assist hospital services in identifying groups of patients at higher risk of potential undisclosed FDV, and those at risk of additional FDV hospital stays, and design services to facilitate provision of additional support, early intervention and/or referral.

- Outcome 6: *Perpetrators stop their violence and are held to account.* This report highlights the number of people with FDV hospital stays by perpetrator type. It highlights the perpetrator relationship responsible for the majority of hospital stays, and the perpetrator type most likely to lead to multiple hospital stays.

This project also has broader benefits, which include:

- informing understanding of how linked data can be used to examine both service use and outcomes associated with people experiencing FDV, and how FDV hospital data are interpreted
- demonstrating the value of improving data in existing national health service data (such as ED data, which does not contain information on external causes of injury – required for the classification of FDV assault)
- improving understanding of the risk of death associated with FDV hospitalised instances of FDV
- contributing to understanding and methods for analysing linked data sets more broadly.

Limitations of the analysis are described in detail in 'Data and methods'.

This report uses the term 'hospital stay' which refers to a continuous period of acute care hospitalisation, and may be made up of one or more acute care 'hospital separations' (that is, a completed hospital admission episode) (see Figure 2.1 for more information). A hospital stay in this report is distinct from any other presentation to hospital emergency departments.

Aims

This project, through exploratory analysis of linked hospital data (via the AIHW's National Integrated Health Services Information Analysis Asset (NIHSI AA)), examines, from 2010–11 to 2018–19:

- the total number of FDV, and repeat FDV, hospital stays related to discrete FDV events
- the characteristics of initial and repeat hospital stays (diagnoses, injuries and perpetrators)
- the number of people who had multiple hospital stays due to the same perpetrator type
- the total number of assaults (including those that have no perpetrator specified).

In addition, in order to gain a broader understanding of the impacts of FDV, this project also examines the differences between those who have had at least one FDV hospital stay and those who have not (using an age, sex, year, Indigenous status and remoteness area matched comparison group).

Specifically, for these 2 groups this project examines whether there are differences in:

- patterns of hospital stays (number of stays, principal diagnoses, number of assaults)
- number of ED presentations
- number and causes of deaths.

2 Data and methods

This project uses data from the AIHW's NIHSI AA. The NIHSI AA contains longitudinal, de-identified, linked data on admitted patient care services (in public and private hospitals where available), ED services and outpatient services in public hospitals, for participating states and territories, along with Medicare Benefits Schedule data, Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data, Residential Aged Care data and National Death Index data.

Scope of analysis

The scope of analysis is limited to the admitted patient care, ED, and death data components of the NIHSI AA. These components were derived from the National Hospital Morbidity Database (NHMD), National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) and the National Death Index (NDI), respectively. However, a key difference between the input data sets, and the components subsequently analysed in the NIHSI AA, is that the NIHSI AA contains additional information, allowing analysis to be undertaken at the person level, while the underlying data sources can only be analysed at the event level.

Scope for the admitted patient care analysis (as derived from the NHMD) included:

- all available years (2010–11 to 2018–19)
- participating states and territories (New South Wales, Victoria, Queensland, South Australia, Tasmania, Australian Capital Territory)
- family and domestic violence patients (see Box 1) and a selected comparison group
- public hospitals only.

Scope for the ED analysis (as derived from the NNAPEDCD) included:

- all available years (2010–11 to 2018–19)
- participating states and territories (New South Wales, Victoria, Queensland, South Australia, Tasmania, Australian Capital Territory)
- family and domestic violence patients (as identified in admitted patient care data; see Box 1 for definitions) and a selected comparison group
- public hospitals only
- non-admitted episodes (ED presentation without subsequent hospital admission).

Scope for the deaths analysis (as derived from the NDI) included:

- all available years (deaths registered from 2010–2019)
- all states and territories
- family and domestic violence patients (see Box 1 for definitions) and a selected comparison group.

Input data sets

Further detail on each of the databases that were used to develop the admitted patient, ED and deaths data components of the NIHSI AA, is provided below.

Boxes 1 and 2 outline key definitions and concepts.

National Hospital Morbidity Database

The NHMD is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals. It is a comprehensive database that has records for all episodes of admitted patient care from essentially all public and private hospitals in Australia.

The NHMD base-counting unit is a hospital separation. Each separation includes a range of demographic and administrative data as well as data on the diagnoses of the patient, external causes of injury, and, where relevant, the patient's relationship to the perpetrator of assault. As a result, NHMD data are used within this report to identify and examine separations related to FDV (see Box 1).

Each episode of care (separation) is assigned a care type, which describes the overall nature of care delivered. There are several care types which can be recorded and therefore, a patient may have several episodes of care between their admission and discharge from hospital. For example, a person who has a brain injury may be admitted to hospital for immediate treatment of the injury in a high care area (such as intensive care) – this would be coded as an acute care episode (separation). Following the first acute care episode, the person may be transferred to another hospital for further treatment. This would also be coded as an acute care episode. Once the person is well enough they may begin a period of in-hospital rehabilitation – this would constitute a new separation, and be coded as a rehabilitation care episode (separation). Following completion of in-hospital rehabilitation, the person may be discharged from hospital, but return several times a week for further same-day rehabilitation treatments. These additional episodes (separations) would be coded as further discrete rehabilitation episodes. The additional discrete records typically do not provide an indication of being related to the same event.

As a result of these complex treatment pathways, a range of different methods can be used to define the unit of analysis, depending on purpose. For example, analysis to support understanding of hospitalisation costs related to a condition would require inclusion of multiple episodes of care (which may be contiguous or may be grouped close together with a small gap).

As the aim of this analysis was to capture discrete FDV events which resulted in an episode of care, rather than all episodes of care which may be related to a single FDV event, only acute care episodes are included. If a patient had any concurrent acute episodes, for the purposes of this analysis, the 2 acute care episodes were treated as one 'hospital stay'.

A similar approach for creating hospital stays using continuous episodes, has been taken in other linked hospitals analyses, such as *Interfaces between the aged care and health systems in Australia: movements between aged care and hospital 2016–17* (AIHW 2020a). See Box 2 for a summary of inclusions and exclusions.

For more information on movements between aged care and hospital, see https://www.aihw.gov.au/reports/aged-care/movements-between-aged-care-and-hospital/related-material.

For more information on hospitals data, see https://www.aihw.gov.au/about-our-data/our-data-collections/national-hospitals.

National Non-admitted Patient Emergency Department Care Database

ED data are a compilation of episode-level records, relating to individuals who are registered for care in public hospital EDs (AIHW 2020c). The base-counting unit for ED data is referred to as a presentation.

ED presentation data in this report are used to look at the number of presentations (which did not result in subsequent hospital admission) among those with at least one FDV hospital stay, and the number of presentations among the comparison group. This report examines all cause ED presentations only, due to complexities associated with the comparability of diagnosis coding over time and across jurisdictions, and temporal coverage that does not align with the NHMD (that is, diagnosis information in ED data is only available from 2012–13, whereas the project scope is from 2010–11). In addition, current data available for principal diagnosis does not support the identification of presentations related to FDV because external cause of injury codes are not available (see 'Future work').

Although ED presentations cannot be attributed to FDV due to lack of external cause of injury data, ED data can still show patterns of use among FDV cases and the comparison population.

For more information on ED data, see https://www.aihw.gov.au/about-our-data/our-data-collections/national-hospitals.

National Death Index

The NDI is a database developed and maintained by the AIHW. The database is a listing of all deaths that have occurred in Australia since 1980. Data come from *Registrars of Births, Deaths and Marriages* in each jurisdiction, the National Coronial Information System and the ABS. It includes information on fact of death and, where available, cause of death. While cause of death can be easily attributed in some cases, it can take longer to determine in complex cases (for example, where a coroner is required to formally investigate and determine cause of death, such as death by suicide), and therefore some deaths will be missing cause of death information due to ongoing coroners' investigations. Additionally, there can be a lag between when 'fact of death' is listed on the NDI, and when the cause of death is added. At the time of data linkage for the NIHSI AA 1.0, cause of death information for deaths that occurred in 2019 was not available in the NDI.

Further information about the NDI is available on the AIHW website at https://www.aihw.gov.au/about-our-data/our-data-collections/national-death-index.

Box 1: Definitions and concepts used in this report

Acute care is defined as care in which the intent is to perform surgery, diagnostic or therapeutic procedures in the treatment of illness or injury. Management of childbirth is also considered acute care (AIHW 2020c).

Care type is defined as the overall nature of a clinical service provided to an admitted patient during an episode of care (admitted care), or the type of service provided by the hospital for boarders or posthumous organ procurement (other care), as represented by a code.

Comparison group is defined as people with at least one hospital stay recorded in admitted patient care data, and matched to the FDV cases on age at first hospital stay, year of first hospital stay, sex, Indigenous status, and remoteness.

(Continued)

Box 1 (continued): Definitions and concepts used in this report

FDV cases are identified from the admitted patient care data where there is at least one hospital stay with an external cause of morbidity coded as assault or maltreatment (X85–Y09 – see Table A.1 for more details), where the perpetrator (5th character code) is specified as:

- spouse or domestic partner (0)
- parent (1)
- other family member (2).

FDV by definition includes sexual assault where the perpetrator is spouse/domestic partner/parent or other family member.

Hospital separation is defined as an episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute care to rehabilitation). Separation also means the process by which an admitted patient completes an episode of care either by being discharged, dying, transferring to another hospital or changing type of care (see Figure 2.1).

Hospital stay is defined as the contiguous period of time a person receives hospital care. A hospital stay may be made up of one or more continuous hospital separations. For example, if an acute separation ends on 01/01/2018 and a subsequent separation starts on 01/01/2018, these 2 separations are counted as the same hospital stay. Similarly, if a person has a long hospital stay for one treatment, but also several 1-day treatments at another hospital or ward (for example, in cases where a person receives dialysis) during the same time period, these separations would be counted as a single 'hospital stay' (see Figure 2.1).

Only separations with a care type of acute are included.

Repeat FDV hospital stay refers to cases where a person was hospitalised on more than one occasion with an external cause of assault or maltreatment (X85–Y09), where the perpetrator was specified as a family member (spouse or domestic partner, parent or other family member). A minimum follow-up period of 1 year was selected to enable a capture of a repeat event. A repeat is only counted where a person previously, physically left hospital and did not have an immediate (same day) hospital stay (where admission mode is not identified as a transfer).

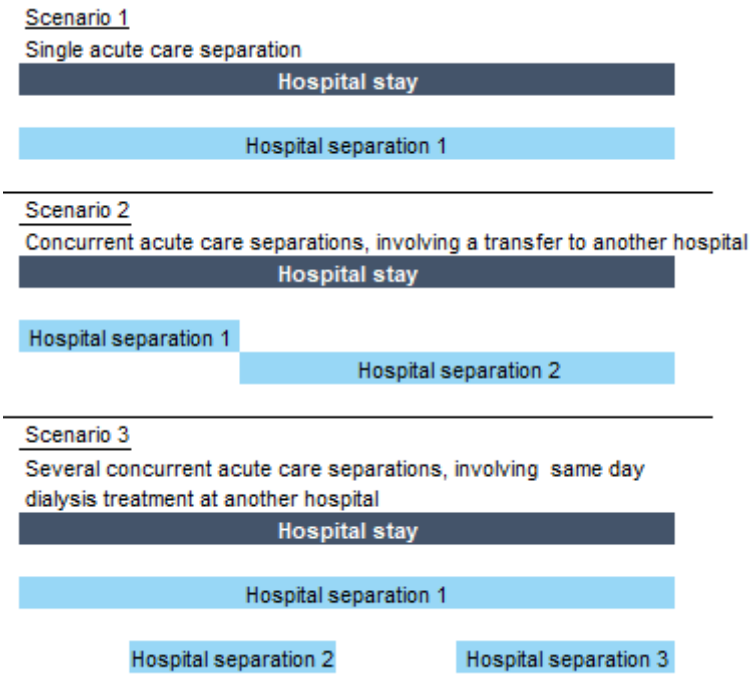
Repeat hospital stay refers to cases included in the analysis of repeat hospital stays for people with at least one FDV hospital stay as well as the matched comparison group. A repeat hospital stay will only be counted where a person was coded as being physically discharged from hospital in the previous hospital stay.

Presentation is the episode of care between when a person presents at an ED and when the non-admitted patient ED clinical care ends. The presentation of a patient at an ED occurs following the arrival of the patient at the ED and is the earliest occasion of being:

- registered clerically
- triaged.

Time to next hospital stay is defined as the time between the end of the first hospital stay (defined as the end of acute episode/s of care), to the start of next hospital stay. This measure is calculated for each additional hospital stay.

Figure 2.1: Acute care hospital separations that can make up a 'hospital stay'



Box 2: Inclusion/exclusion criteria

Patients who are transferred. Transfer records that are concurrent with another acute hospital separation are considered as the same hospital stay. Standalone transfer records (those which do not appear to have any preceding hospital separation) have been retained. This can occur where a transfer has occurred from a hospital that is not included in the NIHSI analysis asset (some private hospitals, and those in Western Australia and the Northern Territory).

Private hospitals. Private hospitals have been excluded from all analytical outputs. This is because there is not equal coverage of private hospital data in the NIHSI AA. Furthermore, most FDV hospital separations occur in public hospitals.

Acute care. Only acute care hospital separations are included. Patients who have a subsequent hospital stay identified as rehabilitation have the rehabilitation episode removed from analysis. That is, subsequent rehabilitation hospital stays are not counted as a repeat case of FDV as it is assumed (but cannot be definitively determined) that the rehabilitation treatment relates to the prior hospital stay/FDV event.

Populations in this report

The case group

The definition for FDV cases is described in Box 1.

To ensure all people with at least one FDV hospital stay have at least 1 year of follow-up (in order to measure repeat hospital stays), the case group is defined as all those who have had at least one FDV hospital stay from 2010–11 to 2017–18 (reference period). Hospital stays that occur in 2018–19 are counted only when a person has had a FDV stay in a previous year.

The comparison population

In order to compare the more general use of hospitals for those with a FDV hospital stay, a comparison hospital population was established. This comparison population was constructed by randomly selecting cases from the remaining hospital population (that is, those that have no FDV hospital stays) with stratification (matching) on the following variables:

- year of index hospital stay
- age group at index hospital stay
- sex
- indigenous status
- remoteness area.

For every one FDV case, 4 control cases were randomly selected from the remaining admitted patient care data, with each control matched to a case on the above stratification criteria.

There were 21 groups that could not be fully stratified by the 5 variables. For these groups, the stratification process was re-run without remoteness. This means there was 175 controls that were not stratified by remoteness.

Missing data

Some records derived from the NHMD did not contain enough information to be able to be assigned a unique identifier in the NIHSI AA, and therefore were removed from analysis:

- 1,179 assault hospital separations (out of a total 166,795) recorded from 2010–11 to 2018–19 had missing person identifiers. Of these, 57% had unknown or unspecified perpetrator information. There is a potential that some of these cases are FDV.
- 408 FDV hospital separations had missing person identifiers (out of a total 40,895). Of these, 56% had a partner perpetrator, 31% had another family member perpetrator, and the remainder had a parent perpetrator.

Missing identifiers represent cases where a person did not provide their name or date of birth when they presented to hospital. This may be more common among vulnerable populations.

Demographics of the case and comparison group

There were 29,210 people identified who had at least one FDV hospital stay recorded in the reference period.

These individuals were predominantly female (68%) and aged between 15 and 44 (67%). Over 1 in 4 (28%) were Indigenous.

The comparison group was selected on a 1:4 ratio, meaning that for every one FDV case, there were 4 matching control cases selected. Therefore, the comparison group contains 116,840 individuals, with the same demographic profile as the cohort group (same proportions in each sex, age group and Indigenous status).

The comparison group may include people who have experienced FDV, and/or been hospitalised due to FDV assault, but the FDV was not recorded in the hospital record. Therefore, this project also examines the level of assault in the comparison group, and the missing or undisclosed perpetrator information for hospitalised assault records.

Analysis methods and assumptions

The NHMD uses the International Classification of Diseases-10-Australian Modification (ICD-10-AM) to code *Diagnoses* and *External causes of morbidity and mortality*. The NHMD data in the NIHSI have a temporal coverage from 2010–11 to 2018–19, which includes several editions of the ICD-10-AM (the 7th to 10th editions). However, as the analysis within this report considers broad ICD-10-AM chapters and the entire time period as a whole, there is minimal impact overall in terms of changes in coding practices over time. However, if trend data of specific conditions were to be considered, careful consideration would need to be given to any updates to the ICD-10-AM editions over time.

In the NHMD information on:

- assault is coded under *External causes of morbidity and mortality*
- injury is coded under *Diagnoses*.

Therefore, the scope for selecting FDV clients and FDV hospital stays, was people and records that had any *External causes of morbidity and mortality* ICD-10-AM codes ranging from X85–Y09 (Assault) with a perpetrator coded as spouse or domestic partner, parent or other family member (5th character codes of 0, 1 or 2, respectively).

For FDV stays, principal diagnosis analysis included all principal diagnoses, regardless of whether the principal diagnosis was indicated as being directly due to FDV assault.

The scope for injury analysis for FDV clients included all FDV hospital stays that had:

- *External causes of morbidity and mortality* ICD-10-AM codes ranging from X85–Y09 (Assault) with a perpetrator coded as spouse or domestic partner, parent or other family member (5th character codes of 0,1 or 2, respectively) and
- Diagnoses ICD-10-AM codes ranging from S00–T98 (Chapter 19 Injury, poisoning and certain other consequences of external causes).

However, when examining hospital data, it is important to consider that:

- a single hospital record may have multiple *Diagnoses* and multiple *External causes of morbidity and mortality*
- an *External causes of morbidity and mortality* code must be used when there is an injury or poisoning *Diagnoses* code, however, *External causes of morbidity and mortality* codes can also be used in conjunction with other types of *Diagnoses*.

Further to this, the basis of analyses within this report is a ‘hospital stay’, which can include several hospital records (see Figure 2.1).

As a result of a single record potentially containing multiple *Diagnoses*, and multiple *External causes of morbidity and mortality*, and because a single 'hospital stay' can include several hospital records, rationale for selecting information from across records making up a hospital stay was determined. This rationale is outlined below.

Selecting assault and FDV assault information within a hospital stay

As a key component of this report is understanding FDV and assault, codes indicating FDV and other assault were prioritised regardless of where they appeared within a hospital stay (that is, regardless of which hospital separation within a stay FDV was recorded, and regardless of whether assault information occurred on the first or subsequent *External causes of morbidity and mortality* codes, see Figure 2.1). That is, a flag for any assault or any FDV assault was established to determine if any hospital separations included within an acute care hospital stay indicated FDV or other assault. This is important to consider as a person could be more likely to disclose the cause of their injuries with an increasing length of their hospital stay (for example, if they are transferred to another hospital, this may provide opportunity away from the perpetrator). It is also important to examine the full range of *External causes of morbidity and mortality* codes (that is in addition to the principal) to fully capture all instances of FDV in hospitalisations data.

Selecting injury information within a hospital stay

The first injury recorded within a hospital record was selected for analysis. This means that the injury code was selected regardless of whether that injury was:

- indicated as being due to FDV assault through the corresponding *External causes of morbidity and mortality* code
- the principal diagnosis or an additional diagnosis.

Despite this method, the vast majority of injuries were the principal diagnosis and indicated as being due to FDV assault through the first *External causes of morbidity and mortality* code.

However, it is still important to consider that for injuries that were not recorded as the principal diagnosis, even though the hospital record indicated FDV assault had occurred, the additional diagnoses injuries may or may not be due to FDV.

Principal diagnoses

The first recorded principal diagnosis within a hospital stay was selected for analysis. That is, the diagnosis from the first hospital separation contained within an entire hospital stay. This provides important contextual information around the diagnosis determined to be chiefly responsible for occasioning a hospitalisation and allows comparison to be made to the general hospitalised population. The principal diagnosis may or may not be directly related to the FDV assault.

Year

In this report, 2 measures are used to represent year, depending on the purpose of the analysis:

- year of index stay: this relates to the first time a person had a hospital stay due to FDV. Analyses are presented by year of index stay to highlight the impact of follow-up time periods on the recording of additional assault cases (that is, those who have an earlier FDV stay, have a longer follow-up period, potentially allowing more FDV stays to be recorded)

- year of stay: this relates to the year of service (when the hospital stay ended). This is used when presenting information on total hospital stays over time.

Measurement period

The temporal coverage of the data are from 1 July 2010 to 30 June 2019. However, for analysis, only people who had an index FDV stay between 1 July 2010 and 30 June 2018 are included to allow a minimum of 1-year follow-up period to enable measurement of repeat FDV.

For the comparison group, the same principal has been applied; that is only those with an index hospital stay between 1 July 2010 and 30 June 2018 are included.

Limitations

Defining the FDV group

The results presented within this report draw from administrative hospitals data. Therefore, a key limitation of this study is that it relates to severe experiences of FDV, most likely physical or sexual in nature; that is, those cases that require admitted hospital treatment and care. In addition to this, it is likely that not all hospitalisations due to FDV are included in the analysis as FDV hospital stays, for example, where the perpetrator has not been identified on the hospital record. In recognition of this limitation, this report presents broader hospital interactions for people with at least one FDV event, including assault hospitalisations where the perpetrator has not been defined as a family member or partner, or the perpetrator is listed as missing or unknown to the victim.

Another limitation of this study is that some FDV hospital separations did not have enough personal information to be linked within the data, and were therefore excluded from the analyses; there were 408 FDV hospital separations where personal information was missing, and were therefore excluded from analyses. This equates to 1% of all possible FDV hospital separations within the NHMD. Similarly, 1% of all assault hospital separations did not have personal information; therefore, the number of assaults presented in this study may be an undercount. By comparison, around 0.7% of all hospital separations had missing personal information.

Defining the comparison group

The comparison group was selected using stratified random sampling, with cases stratified on year of first hospital stay, age at first hospital stay, sex, Indigenous status and remoteness area. These are all factors known to be associated with FDV which could influence the hospital interactions being analysed and are therefore controlled for. However, this list is not exhaustive, and there may be unknown factors, or factors that are not captured within the hospital data that are likely to also influence results.

It is important to note that the comparison group may include people who have experienced FDV, and have been admitted for injuries related to FDV, but the assault, and/or perpetrator has not been identified on the hospital record.

National Non-Admitted Patient Emergency Department Care Database

External causes of injury information is not available in national ED data, and therefore those presentations that are due to FDV cannot be determined. Principal diagnosis information is also limited in the ED data, with data only available from 2013–14 onwards. Furthermore, coding practices of diagnosis data have varied over time and across jurisdictions.

Remoteness and socioeconomic areas (of patients' usual residence)

Remoteness and socioeconomic areas are not explicitly analysed in this report. However, remoteness area at the time of a person's first hospital stay is used for stratification purposes where possible, to make up the comparison group. There were 175 controls (out of 116,840) that could not be completely stratified based on remoteness area. These 175 controls were selected by running the stratification process again, but without remoteness area included.

Future reporting could generate analyses by socioeconomic area of usual residence. However, as the data are longitudinal, and a person may change postcodes overtime, careful consideration would need to be given.

Administrative data sources

This project focused on national admitted hospital data. Within these administrative hospital data, only acute care hospital stays were analysed in an attempt to capture discrete FDV events. However, a limitation of this is that a discrete FDV event may be missed. For example, if there was no associated acute care.

In order to measure the full system impacts of FDV, a person's full admitted hospital experience should be analysed including periods of rehabilitation and other care types, and ideally other aspects of the hospital system, for example, ED and outpatients, if FDV-related information were available in the data.

As mentioned in Chapter 1, analysis of service-level data will not represent the complete picture of people experiencing FDV and/or of those who may need the specific service being provided.

The NIHSI AA also has some limitations. Currently, the NIHSI AA does not include data from Western Australia and the Northern Territory. This is a key limitation as it means that there is under-representation, particularly in relation to remoteness areas and Aboriginal and Torres Strait Islander populations. ED data are also not available for the Australian Capital Territory in 2015–16.

In addition, all cause of death information is missing in the most recent year of data (2019) as cause of death information was not available in the NDI at the time of linkage in the NIHSI. There can also be a lag in cause of death information (particularly for coroners' cases) which can result in missing cause of death information in the final years of this study (in 2017 and 2018).

Data coverage

Hospitals data for Western Australia and the Northern Territory are not included in the NIHSI AA 1.0. This is a key limitation of the NIHSI AA 1.0, as data from the NHMD show that in Australia in 2019–20, around 15% of FDV injury hospital separations occurred in Western Australia, and 21% occurred in the Northern Territory (AIHW 2021d).

Data linkage

This report analyses data from the AIHW's NIHSI AA. The NIHSI AA contains a wide range of person and service-level information from a range of Commonwealth and state and territory health data sets, linked via the AIHW's Data Integration Services Centre.

Due to the development of the NIHSI AA, the number of individuals who have been hospitalised due to FDV in Australia can be determined (in addition to the routinely reported number of hospital stays). The NIHSI AA also provides the opportunity to analyse the interactions of individuals hospitalised for FDV with other parts of the hospital system (for example, EDs), and to explore how these patterns may vary to those hospitalised for other reasons. This includes analysis of the frequency and type of injuries that people are hospitalised for, or present to EDs with.

Indigenous status

In the NIHSI AA, Indigenous status is constructed from all available Indigenous status information (that is, information is collated across most of the data sets included in the NIHSI).
If a person is ever identified as Indigenous (that is, in any of hospitals, aged care and NDI data), their status is set to Indigenous.

3 Family and domestic violence hospital stays

People who have injuries and/or other conditions as a result of FDV may seek treatment from the health-care system, including hospitals. Hospital care is generally sought for more serious injuries, and in order for a patient to be admitted a threshold level of care and/or treatment is usually required. When a person is admitted for hospital treatment, the injury and the perpetrator's relationship to the victim (if disclosed) may be recorded in the patient's record. Using this information, the number of people, and the number of hospital stays that occur due to identified FDV can be determined.

However, not all people who have injuries or conditions as a result of FDV will seek hospital treatment, and of those that do, not all will disclose the cause (for example, assault) and/or the relationship to the perpetrator (for example, partner). Because particular types of relationship between the victim and the perpetrator are required for an assault to be considered FDV, the number of FDV hospital stays, and the number of people seeking hospital treatment due to FDV is likely to be an undercount (see Chapter 2 for data relating to missing information).

In recognition of this, Chapter 4 examines the total number of other assaults for the FDV cohort and a matched comparison group. Chapter 5 examines the relationship to the perpetrator for those who have had an identified FDV stay and those who have had other assault stays.

Key findings:

From 2010–11 to 2017–18, 29,210 people had at least one FDV hospital stay*. Of these:

- just over 2 in 3 were female (68%), with 1 in 3 (32%) male
- on their first FDV stay, 1 in 4 were aged 25–34 (25%), 1 in 5 were aged 35–44 (21%) and 15–24 (21%)
- most people (88% or 25,616) who had a FDV stay, had only one FDV stay; that is, repeat FDV hospital stays made up a small proportion of the total FDV hospital stays
- 28% (or 8,232) of people who had a FDV stay were Indigenous. Indigenous people were more likely than non-Indigenous people to have more than one FDV hospital stay (20% compared with 9%)
- females were more likely than males to have more than one FDV hospital stay (14% and 9%, respectively).

* The FDV cohort is anyone who had a FDV stay from 2010–11 to 2017–18, but analysis includes separations that occurred in 2018–19. Data for Western Australia and Northern Territory were not available for analysis.

Demographics of the family and domestic violence hospital cohort

From 2010–11 to 2017–18, 29,210 people had at least one hospital stay due to FDV (the FDV cohort is anyone who had a FDV stay from 2010–11 to 2017–18, but analysis includes stays that occurred in 2018–19; data for Western Australia and Northern Territory were not available for analysis). Of these:

- 68% were female, and 32% were male (Table S1)
- 28% were Indigenous, and 72% were non-Indigenous (Table S2)
- 25% were aged 25–34, 21% were 35–44 and 21% were 15–24, at their first FDV hospital stay (Table S3).

Similarly, of the total 34,416 FDV hospital stays that occurred to June 2019:

- 70% were for females, and 30% for males
- 32% were for Indigenous, and 68% were for non-Indigenous
- 26% occurred among those who were aged 25–34 at their first hospital stay, 22% among those aged 35–44 and 20% among those aged 15–24, at their first hospital stay.

Family and domestic violence hospital stays over time

From 2010–11 to 2017–18 the number of people who had their 'first' FDV hospital stay steadily increased each year and was 32% higher in 2017–18 compared to 2010–11(Table 3.1) (note that some people may have had their first ever hospitalisation prior to the measurement period). The total number of FDV hospital stays that occurred each year also increased over the same time period (up 50% by 2017–18) (Figure 3.1 and Table S10). The Australian population also increased over the same time period, however, only by around 12%, and therefore does not account for the 32% increase in people who had their first FDV hospital stay. Additionally, prevalence estimates of FDV have remained relatively stable over this same period (ABS 2017).

Therefore, the increase in 'first' FDV hospital stays, and the increase in FDV hospital stays overall may be due to increased disclosure of FDV in hospitals (as a result of increased awareness and/or changes in attitudes) and/or increased identification of FDV by health professionals (for example, through screening tools and/or increased training and awareness). This is evidenced by a proportional decrease in 'other' assault hospital stays among this cohort over the period. That is, 'other' assaults may have proportionally decreased due to increased identification of FDV assault (see Chapter 4 for more detail on assault hospital stays). It is also possible that some of the increase in FDV hospital stays overall is due to increased FDV events requiring hospitalisation.

Increased utilisation of services due to FDV has occurred in other areas, for example, police, specialist homelessness services and child protection (AIHW 2019c).

Table 3.1: Number of people, and number of FDV hospital stays, by year of index FDV hospital stay

Year of first FDV hospital stay	Number of people	Total number of FDV hospital stays (for people by year of their index stay)
2010–11	3,151	4,026 (from 2010–11 to 2018–19)
2011–12	3,225	4,116 (from 2011–12 to 2018–19)
2012–13	3,440	4,153 (from 2012–13 to 2018–19)
2013–14	3,566	4,183 (from 2013–14 to 2018–19)
2014–15	3,702	4,266 (from 2014–15 to 2018–19)
2015–16	3,860	4,434 (from 2015–16 to 2018–19)
2016–17	4,119	4,703 (from 2016–17 to 2018–19)
2017–18	4,147	4,535 (from 2017–18 to 2018–19)
Total	**29,210**	**34,416**

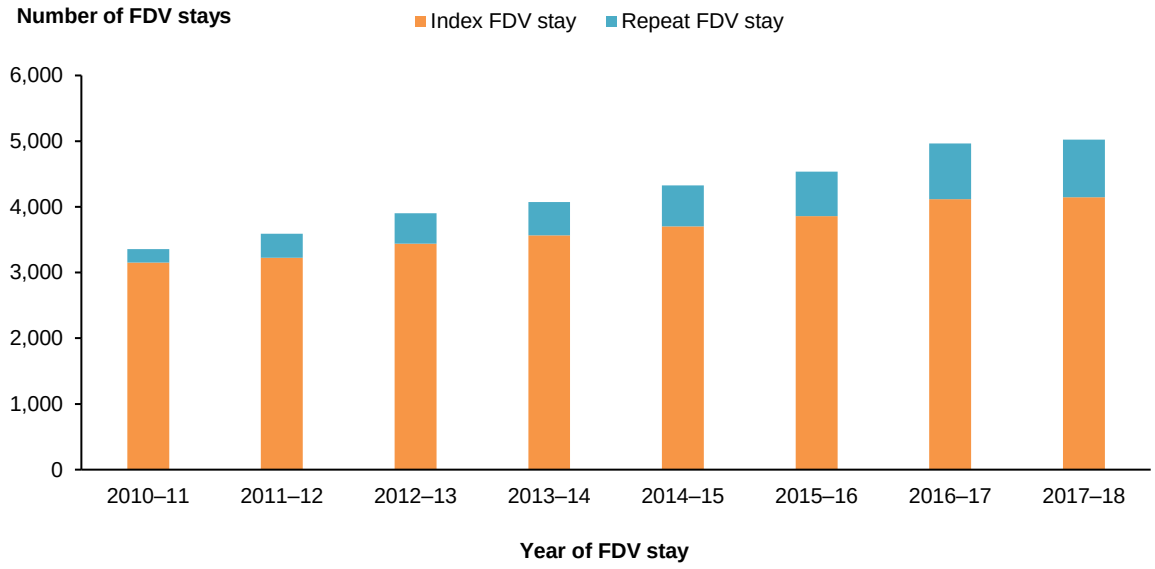
Notes

1. The number of family and domestic violence hospital stays include those that occurred in 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integration Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S9.

Figure 3.1: Total number of FDV hospital stays by year, by index or repeat FDV stay, 2010–11 to 2017–18

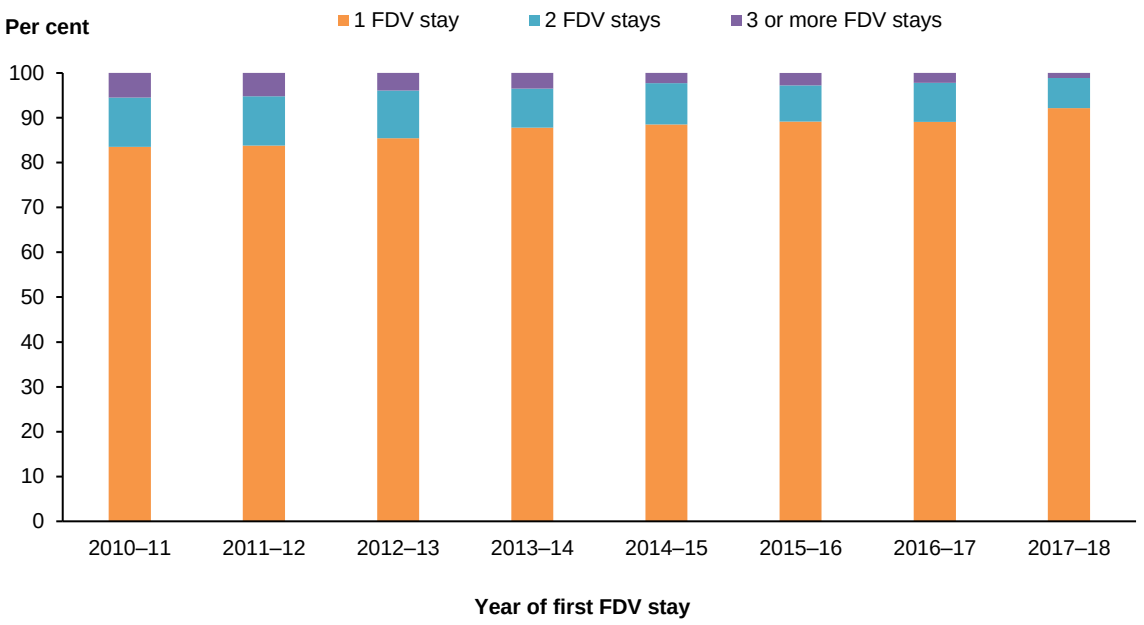


Note: Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania and the Australian Capital Territory.

Source: AIHW analysis of the National Integration Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S10.

The total number of FDV hospital stays a person experiences is related to time under observation. Figure 3.2 shows that those who had their first FDV hospital stay in 2010–11 were more likely to have several FDV hospital stays than those who had their first FDV hospital stay in 2017–18 (17% compared with 8%). This difference is due primarily to the relative difference in follow-up periods for these groups – those whose first FDV hospital stay was identified in 2010–11 have a longer follow-up period than those identified in 2017–18 (8 years compared with 1 year).

Figure 3.2: FDV hospital stays by year of first FDV stay, 2010–11 to 2017–18, %



Notes

1. The number of family and domestic violence hospital stays include those that occurred in 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integration Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S12.

Repeat family and domestic violence hospital stays

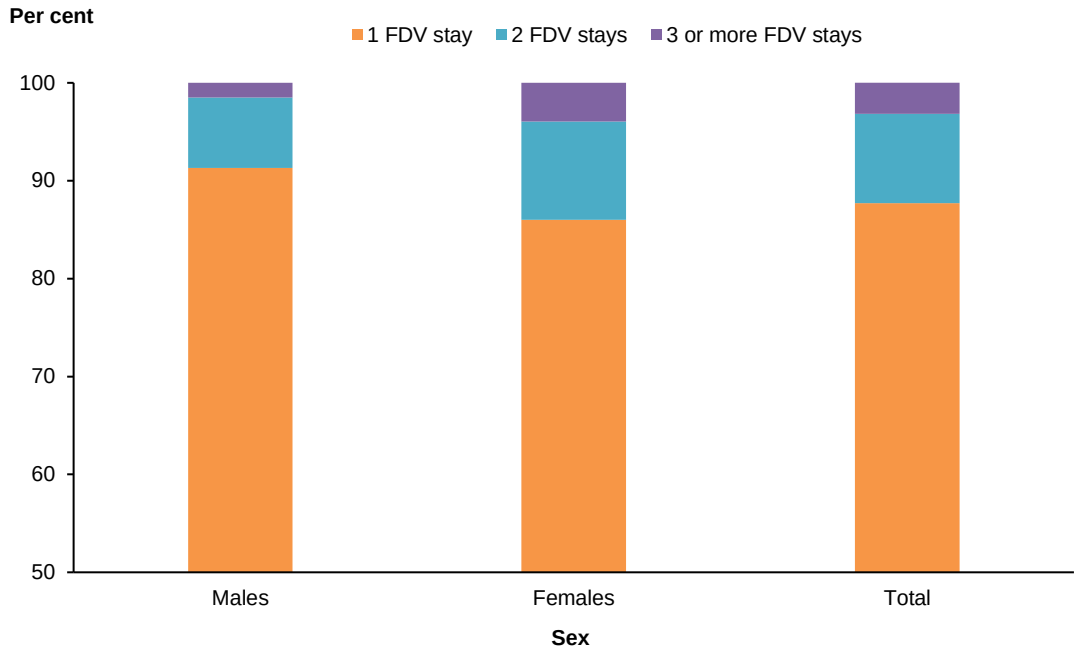
Table 3.2 shows that of those who had at least one FDV hospital stay from 2010–11 to 2017–18, most (88%) had one FDV hospital stay and 12% had 2 or more FDV hospital stays – 9% had 2, and 3% experienced 3 or more in the time to 2018–19. These results remain consistent when looking at a 3-year follow-up period; 89% had one FDV hospital stay, 8% had 2, and 2% experienced 3 or more.

Of the total 33,416 FDV hospital stays that occurred from 2010–11 to 2018–19, 5,206 or 15% were repeat FDV stays (Table S10). This ranged from 6% of stays that occurred in 2010–11, to 17% of stays in 2017–18 (all stays in 2018–19 were repeat stays, due to cohort selection method).

Sex

Even though people most commonly had one FDV hospital stay (88% overall), females were more likely than males to have multiple hospital stays; 14% compared with 9% (Figure 3.1).

Figure 3.3: FDV hospital stays by sex, 2010–11 to 2018–19, %



Notes

1. The number of family and domestic violence hospital stays include those that occurred in 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S4.

Table 3.2: Number of people with a FDV hospital stay, by number of stays and sex, 2010–11 to 2018–19

	Males	Females	Persons	Males	Females	Persons
Number of FDV stays	**N**	**N**	**N**	**%**	**%**	**%**
	People with FDV hospital stays from 2010–11 to 2018–19*					
1	8,496	17,120	25,616	91.3	86.0	**87.7**
2	670	1,996	2,666	7.2	10.0	**9.1**
3+	140	788	928	1.5	4.0	**3.2**
Total	**9,306**	**19,904**	**29,210**	**100**	**100**	**100**
	People with FDV hospital stays, and repeats within 3 years of index FDV stay					
1	6,235	12,491	18,726	92.2	88.1	**89.4**
2	442	1,290	1,732	6.5	9.1	**8.3**
3+	84	402	486	1.2	2.8	**2.3**
Total	**6,235**	**14,183**	**20,944**	**100**	**100**	**100**

* The number of family and domestic violence hospital stays include those that occurred in 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

Note: Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

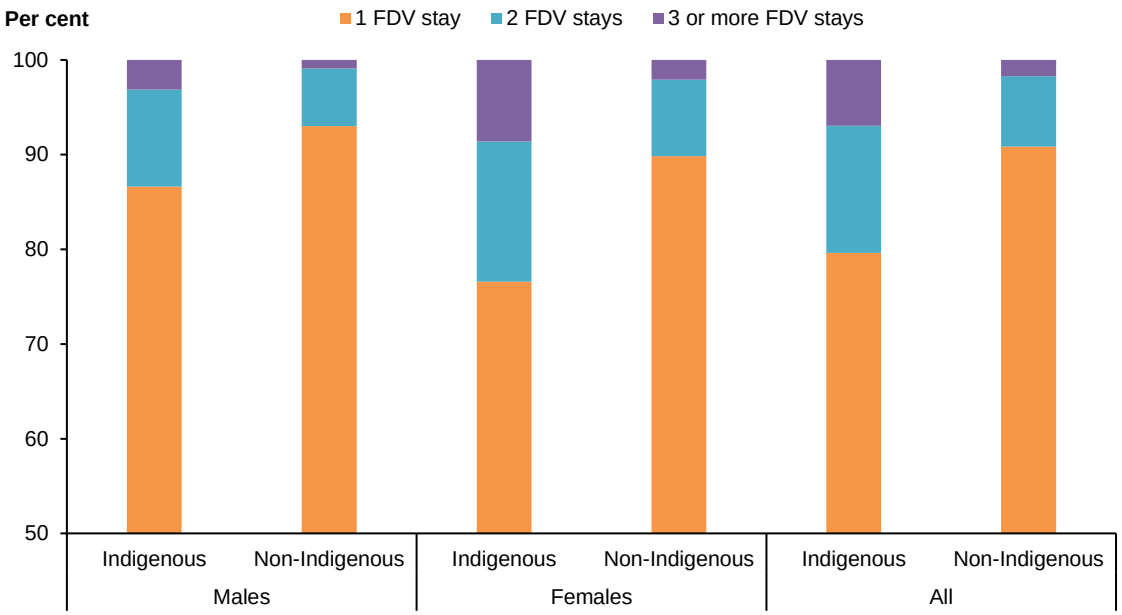
Sources: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Tables S4 and S14.

Aboriginal and Torres Strait Islander people

Aboriginal and Torres Strait Islander people are over-represented among those who had a FDV hospital stay. While making up approximately 3.3% of the Australian population in 2016, Indigenous Australians accounted for 28% of people with a FDV stay and 32% of FDV hospital stays from 2010–11 to 2018–19 (ABS 2018, Table S2).

Indigenous Australians were more likely to experience more than one FDV hospital stay than non-Indigenous Australians (20% compared with 9%). Of Indigenous females who had at least one FDV hospital stay, almost 1 in 4 had multiple FDV stays (23%), compared with 1 in 10 non-Indigenous females (10%) (Figure 3.2 and Table 3.3). Similarly, Indigenous males were more likely than non-Indigenous males to have repeat FDV stays (13% and 7%, respectively).

Figure 3.4: Repeat FDV hospital stays by sex and Indigenous status, 2010–11 to 2018–19, %



Notes

1. The number of family and domestic violence hospital stays include those that occurred in 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S7.

Table 3.3: Number of people with a FDV hospital stay, by number of FDV hospital stays, sex and Indigenous status, 2010–11 to 2018–19

	Number of FDV hospital stays			
	1	2	3 or more	All
		Males		
Indigenous	2,160	255	78	2,493
Non-Indigenous	6,336	415	62	6,813
Total	**8,496**	**670**	**140**	**9,306**
		Females		
Indigenous	4,395	850	494	5,739
Non-Indigenous	12,725	1,146	294	14,165
Total	**17,120**	**1,996**	**788**	**19,904**
		Total		
Indigenous	6,555	1,105	572	8,232
Non-Indigenous	19,061	1,561	356	20,978
Total	**25,616**	**2,666**	**928**	**29,210**

Notes

1. This table includes all people with an index FDV hospital stay between 2010–11 and 2017–18 and a repeat FDV hospital stay from 2010–11 to 2018–19.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integration Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S6.

Age at first FDV hospital stay

Table 3.4 shows the age group at which people had their first FDV hospital stay. The most common age at first FDV hospital stay was 25–34 (25%), followed by 35–44 (21%) and 15–24 (21%). However, those most likely to experience multiple FDV hospital stays were those aged 35–44 (15.4%) followed by 25–34 (14.6%) and 45–54 (12.8%) (Figure 3.5).

These age groups are similar to those reported in other sources. According to the Personal Safety Survey, females aged 18–24 were most likely to report experiences of violence in the last 12 months (12%) followed by those aged 25–34 (7%) and 35–44 and 45–54 (4% each) (ABS 2017).

A systematic review of risk factors associated with FDV shows a decrease in the incidence of FDV with increasing age (Capaldi et al. 2012).

Table 3.4: People with at least one FDV hospital stay by age at first FDV stay, 2010–11 to 2018–19

Age at first FDV stay	0–14	15–24	25–34	35–44	45–54	55–64	65+	Total
Number	2,390	5,993	7,357	6,148	3,994	1,702	1,626	29,210
%	8.2	21	25	21	14	5.8	5.6	100.0

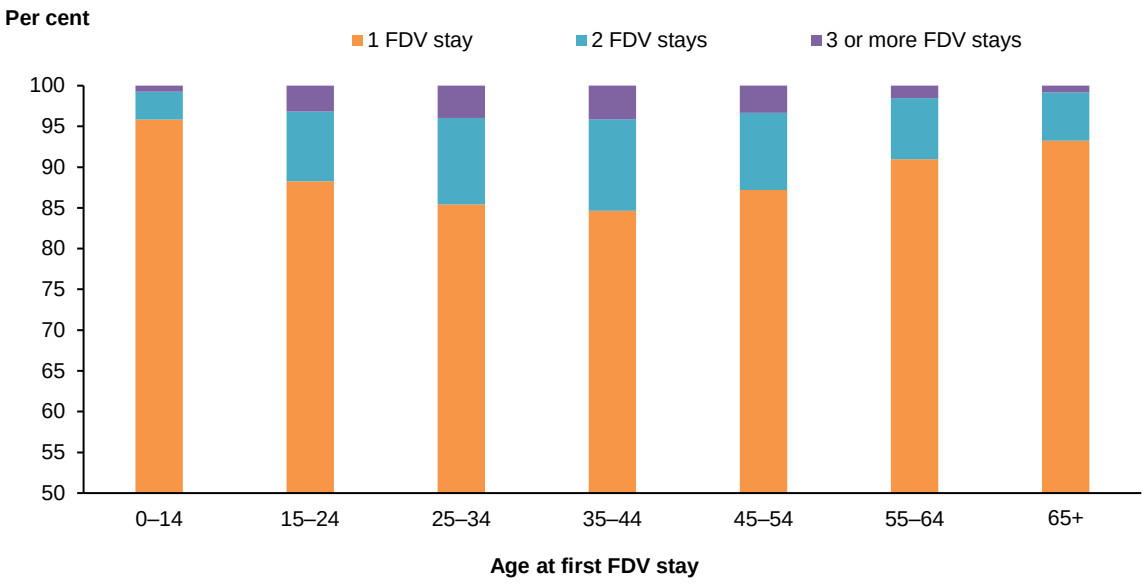
Notes

1. The number of family and domestic violence hospital stays include those that occurred in 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0:Table S3.

Figure 3.5: FDV hospital stays by age at first hospital stay, 2010–11 to 2018–19, %



Notes

1. The number of family and domestic violence hospital stays include those that occurred in 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S8.

Time between hospital stays

For some people, the experience of repeat FDV hospital stays occurs over a relatively long period with some people having over 6 years between identified FDV hospital stays (Table 3.5 and Figure 3.6).

The most common timeframe between FDV hospital stays for those that had multiple hospital stays, was less than 1 year (62%), followed by 1–2 years (16%). This is true regardless of the follow-up time period. Table 3.5 demonstrates the different follow-up periods for each hospital stay. It shows that even for hospital stays that occurred in 2010–11 (which has a full 9-year follow-up period) 1 year was the most common time to next FDV hospital stay (46% or 270 FDV stays occurred in less than 1 year).

Table 3.5: Number of FDV stays by time to next FDV hospital stay, by year of FDV hospital stay

Year of FDV hospital stay	Number of FDV stays by time to next FDV hospital stay						
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	Between 5 and 6 years	Between 6 and 9 years
2010–11	270	85	61	44	31	35	60
2011–12	344	84	61	53	48	42	41
2012–13	327	118	64	61	52	38	18*
2013–14	364	94	70	52	44	21*	n.a.
2014–15	388	103	72	62	19*	n.a.	n.a.
2015–16	404	120	80	34*	n.a.	n.a.	n.a.
2016–17	513	136	54*	n.a.	n.a.	n.a.	n.a.
2017–18	469	66*	n.a.	n.a.	n.a.	n.a.	n.a.
2018–19	104*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
All	3,183	806	462	306	194	136	119

* Due to the cohort selection method, the number of FDV assaults for 2018–19 includes only those cases where a person has had a prior FDV assault (from 2010–11 to 2017–18), and does not include all FDV assaults that occurred in 2018–19.

Notes

1. Includes all FDV hospital stays for people with an index FDV stay between 2010–11 and 2017–18 and a repeat FDV hospital stay from 2010–11 to 2018–19.

2. This table presents data on the time between repeat FDV hospital stays. It is calculated as the difference between the end of one FDV stay, and the start of the next, and is calculated for each additional FDV hospital stay.

Source: AIHW analysis of the National Integration Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S13.

Injuries

Consistent with existing research, head injuries were the most common Injury and poisoning diagnosis recorded in a FDV hospital stay (as recorded on the first hospital separation record) (51%). The next most common injuries were those to the abdomen (7.5%), thorax (7.5%) and wrist and hand 6.6% (Table 3.6 and Figure 3.6). The top 5 injuries accounted for 78% of all FDV hospital stay injuries.

Table 3.6: Leading 10 injuries recorded, total number of FDV hospital stays, 2010–11 to 2018–19

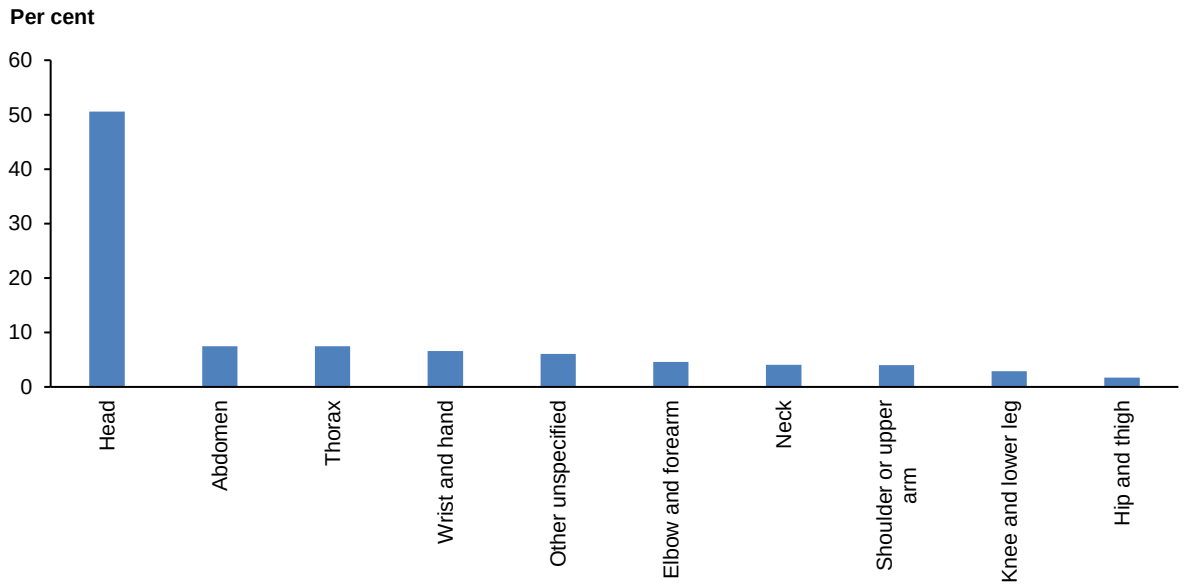
	FDV hospital stays	
Type of injury	**Number**	**%**
Head injury	16,681	51
Abdomen	2,471	7.5
Thorax	2,463	7.5
Wrist and hand	2,184	6.6
Other unspecified effects of external causes (includes asphyxiation and maltreatment)	2,002	6.1
Elbow and forearm	1,509	4.6
Neck	1,337	4.1
Shoulder or upper arm	1,327	4.0
Knee and lower leg	946	2.9
Hip and thigh	571	1.7
No injury recorded	1,406	
Total FDV hospital stays with an injury recorded	33,010	100.00
Total FDV hospital stays	**34,416**	

Notes

1. This table presents the first Injury and poisoning diagnosis coded within a FDV hospital stay. The injury may or may not be associated with the FDV assault. Multiple injuries may be recorded within a single hospital stay.
2. Injuries are coded according to ICD-10-AM classification S00–T98.
3. Not all FDV assaults had an associated injury recorded. That is, some FDV assault hospitalisations are for conditions other than injuries.

Source: AIHW analysis of the National Integration Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S18.

Figure 3.6: Leading 10 injuries for FDV stays, 2010–11 to 2018–19, %



Notes

1. This figure presents the first injury coded within a FDV hospital stay. The injury may or may not be associated with the FDV assault. Multiple injuries may be recorded within a single hospital stay.
2. Injuries are coded according to ICD-10-AM classification S00–T98.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S18.

Similarly, among those who experienced multiple FDV hospital stays, the most common injuries were head injury, injury to the thorax, and wrist and hand. This pattern remained largely consistent across each additional stay (Table 3.7). The top 5 injuries accounted for between 78–81% of injuries in the first 3 FDV hospital stays.

Table 3.7: Top 5 most common injuries, by hospital stay sequence for those that have experienced multiple FDV hospital stays, 2010–11 to 2018–19

	Injury diagnosis		
Rank	**First hospital stay**	**Second hospital stay**	**Third hospital stay**
1st	Head injury (53.5%)	Head injury (51.9%)	Head injury (54%)
2nd	Wrist and hand (7.9%)	Thorax (8.0%)	Thorax (10.0%)
3rd	Abdomen (7.0%)	Wrist and hand (7.2%)	Abdomen (6.9%)
4th	Thorax (6.8%)	Abdomen (6.2%)	Elbow and forearm (5.4%)
5th	Elbow and forearm (5.0%)	Elbow and forearm (5.1%)	Wrist and hand (4.6%)
% of total injury hospital stays	**(80%)**	**(78%)**	**(81%)**

Notes

1. This table presents the first injury coded within each FDV hospital stay. The injury may or may not be associated with the FDV assault. Multiple injuries may be recorded within a single hospital stay.

2. This table includes injuries that occurred within index FDV hospital stays that occurred between 2010–11 and 2017–18 and any repeat hospital stays that occurred in 2018–19.

3. Injuries are coded according to ICD-10-AM classification S00–T98.

Sources: AIHW analysis of the National Integration Health Services Information Analysis Asset (NIHSI AA) version 1.0; tables S21–S23.

The above analyses are based on the first injury recorded in a hospital stay (as recorded in the first hospital separation record). However, a single hospital separation may involve multiple diagnoses and therefore have multiple injuries recorded. Table 3.8 shows that more than half of FDV hospital stays had more than one injury recorded on the initial hospital separation. However, the most common number of injuries recorded was one with 43% or 14,640 of FDV hospital stays, 24% of hospital stays had 2, and 13% had 3. Around 8% had 5 or more injuries recorded (Table 3.8 and Figure 3.7). This pattern remained relatively consistent across 1st, 2nd and 3rd hospital stays (tables S26–S28).

Table 3.8: Number of injuries recorded in each FDV hospital stay, 2010–11 to 2018–19

Number of injuries	Number of hospital stays	%
1	14,640	42.5
2	8,324	24.2
3	4,608	13.4
4	2,534	7.4
5	1,280	3.7
6	644	1.9
7	397	1.2
8	195	0.6
9	140	0.4
10 or more	248	0.7
Missing	1,406	4.1
Total FDV stays	**34,416**	**100**

Notes

1. This table presents the first injury coded within a FDV hospital stay. The injury may or may not be associated with the FDV assault. Multiple injuries may be recorded within a single hospital stay.

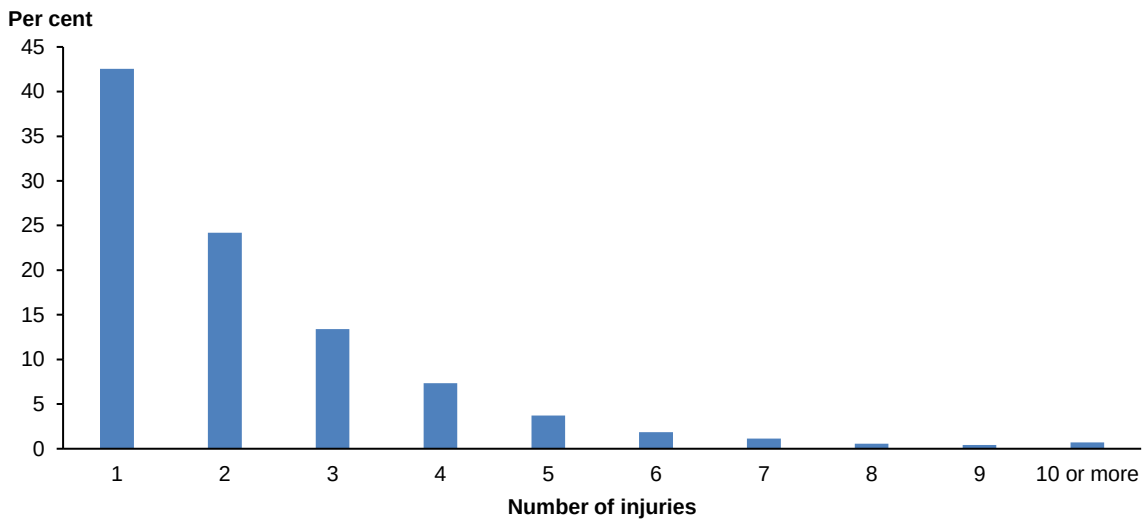
2. This table includes injuries that occurred within index FDV hospital stays that occurred between 2010–11 and 2017–18 and any repeat hospital stays that occurred in 2018–19.

3. Injuries are coded according to ICD-10-AM classification S00–T98.

4. The number of injuries is taken from the first separation within a total hospital stay.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0;Table S24.

Figure 3.7: Number of injuries for FDV hospital stays, 2010–11 to 2018–19, %



Notes

1. This figure includes injuries that occurred within index FDV hospital stays that occurred between 2010–11 and 2017–18 and any repeat hospital stays that occurred in 2018–19.

2. The number of injuries is taken from the first separation within a total hospital stay.

3. Injuries are coded according to ICD-10-AM classification S00–T98.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S24.

4 Assault hospital stays

In recognition that some people could be admitted to hospital for treatment of an injury due to FDV, but the relationship to the perpetrator is unspecified or not disclosed (meaning the assault would not be classified as FDV), this analysis aims to look at all types of assault hospital stays for the FDV group. To assist with interpretation of these analyses, these results are presented alongside a comparision group, matched on age, sex, Indigenous status and remoteness area, who have had at least one hospital stay in the same 9-year period (but none due to FDV). Important to consider is that for both groups (and all types of conditions) a hospital stay is defined as any continuous period of acute hospital care.

Key findings:

From 2010–11 to 2018–19:

- Other assault hospital stays (not identified as FDV) were more common among the FDV group than the comparison group (2% of total hospital stays compared with 0.6%).
- When all assault hospital stays are considered, 21% of the FDV group had multiple assault hospital stays, (compared with 12% when only examining FDV assault stays), and 0.5% for the comparison group.

Number of assault hospital stays

The 29,210 people who experienced at least one FDV hospital stay, had a total of 39,972 assault hospital stays overall. This means that in addition to 34,416 FDV hospital stays, there were 5,556 other assault hospital stays among this group (Table S51).

One in 5 of the FDV group (21%) had multiple assault hospital stays (Table 4.1). The vast majority (98%) of the comparison group did not have any assault hospital stays, and those that did were more likely to be male (64%) than female (36%) (despite the comparison group being mostly female). This aligns with general hospital statistics, where non-FDV assault hospital separations are higher among males than females (AIHW 2021e). Of those in the comparison group who had at least one assault hospital stay, 1 in 5 had multiple (20%). Of all assault hospital stays among the comparison group, 70% had perpetrators that were coded in the data as ‘unspecified’. Therefore, some of these cases may be undetected or reported FDV cases (see Chapter 5 for more detail on perpetrators).

Given the comparison group has so few assault hospitalisations (less than 3% of the cohort, and less than 1% of hospital stays) (tables S36 and S52), additional assaults among the FDV group could also be due to undetected FDV (either undisclosed or unidentified in the hospital data). Other assaults account for around 14% of the total assaults requiring hospitalisation among the FDV group.

Table 4.1: Number of assault hospital stays for the FDV and comparison groups, by sex, 2010–11 to 2018–19

	Number of assault hospital stays									
	FDV population					Comparison group				
Sex	**0**	**1**	**2**	**3 +**	**Total**	**0**	**1**	**2**	**3+**	**Total**
					Number					
Males	n.a.	7,293	1,288	725	9,306	35,360	1,435	268	110	37,173
Females	n.a.	15,829	2,583	1,492	19,904	78,657	830	143	37	79,667
Total	**n.a.**	**23,122**	**3,871**	**2,217**	**29,210**	**114,017**	**2,265**	**411**	**147**	**116,840**
					Per cent					
Males	n.a.	78	14	7.8	100	95	3.9	0.7	0.3	100
Females	n.a.	80	13	7.5	100	99	1.0	0.2	0.0	100
Total	**n.a.**	**79**	**13**	**7.6**	**100**	**98**	**1.9**	**0.3**	**0.1**	**100**

Notes

1. The number of assault hospital stays include those that occurred from 2010–11 to 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Sources: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; tables S34 and S37.

Table 4.2 and Figure 4.1 show the total number of assault hospital stays (FDV and other assaults) for the FDV group over time. From 2010–11 to 2017–18 the proportion of total assault stays that were 'other' decreased from 14% to 11%, while the proportion that were defined as FDV assaults increased from 86% to 89%. This could be due to an increase in identification of perpetrators enabling previously undefined assaults to be classified as FDV.

Table 4.2: Total number of assault hospital stays, by year of stay, among the FDV group, 2010–11 to 2017–18

Year of hospital stay	Number of FDV assault hospital stays	% of total assault hospital stays	Number of other assault hospital stays	% of total assault hospital stays	Total assault hospital stays
2010–11	3,358	85.6	566	14.4	3,924
2011–12	3,589	85.0	634	15.0	4,223
2012–13	3,901	85.5	659	14.5	4,560
2013–14	4,075	85.7	678	14.3	4,753
2014–15	4,328	87.4	624	12.6	4,952
2015–16	4,537	88.0	616	12.0	5,153
2016–17	4,964	87.9	682	12.1	5,646
2017–18	5,023	89.2	608	10.8	5,631
2018–19*	641	n.p.	489*	n.p.	1,130*
Total	34,416	86.1	5,556	13.9	39,972

* Due to the cohort selection method, the number of assaults for 29,210 includes only those cases where a person has had a prior FDV assault (from 2010–11 to 2017–18), and does not include all FDV and other assaults that occurred in 2018–19.

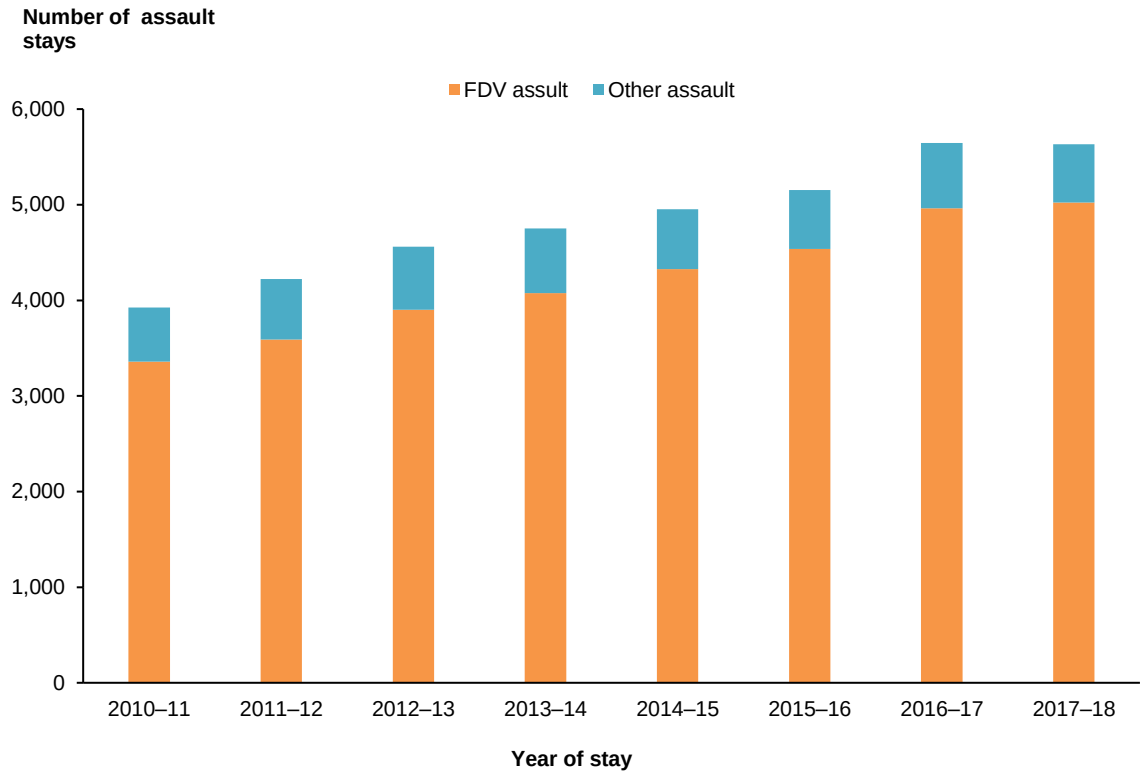
Notes

1. Due to the cohort selection method, the number of assault hospital stays include those that occurred from 2010–11 to 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18. That is, the number of assaults for 2018–19 includes only those cases where a person has had a prior (2010–11 to 2017–18 FDV assault), and not all FDV and other assaults that occurred in 2018–19.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S40.

Figure 4.1: Number of assault hospital stays among the FDV group, by assault type, 2010–11 to 2017–18



Note: Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S40.

Repeat assault hospital stays

Of the 29,210 people who had a FDV hospital stay, 1 in 5 (21%) had multiple (2 or more) assault hospital stays, compared with 1 in 8 (12%) for multiple FDV stays (Table 4.3). As discussed previously, these additional assault hospital stays may be undetected FDV (that is, those where the perpetrator has not been identified on the hospital record (see Chapter 5)). If these additional assaults were undetected FDV assaults, the number of people who experienced repeat FDV hospital stays could be almost double.

Table 4.3: Total number of assault hospital stays, among the FDV group, 2010–11 to 2018–19

	People	%
Number of assault hospital stays		
1	23,122	79.2
2 or more	6,088	20.8
2	*3,871*	*13.3*
3 or more	*2,217*	*7.6*
Total	29,210	100
Number of FDV Hospital stays		
1	25,616	87.7
2 or more	3,594	12.3
2	*2,666*	*9.1*
3 or more	*928*	*3.2*
Total	29,210	100

Notes

1. The number of assault hospital stays include those that occurred from 2010–11 to 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Sources: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; tables S4 and S14.

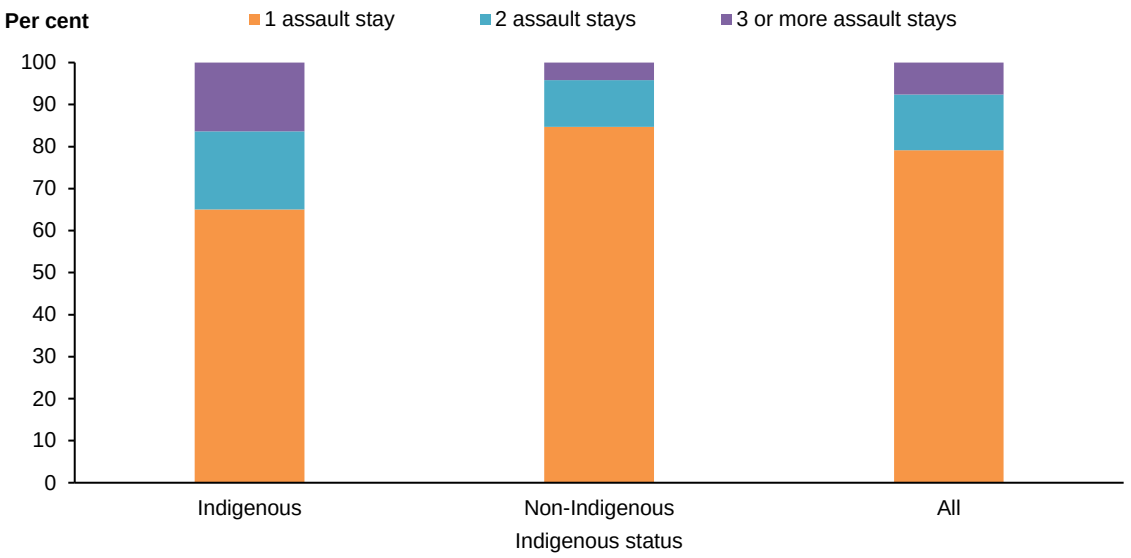
Sex

Within the FDV group, males were slightly more likely than females to have multiple assault hospital stays (22% compared with 20%) (Table S34). This aligns with national data, where males in the Australian population are generally more likely to have assault hospital stays than females (AIHW 2019a).

Aboriginal and Torres Strait Islander people

Indigenous people were more likely than non-Indigenous people to have multiple assault hospital stays (Figure 4.2): over 1 in 3 (35% or 2,877) Indigenous people who had at least one assault hospital stay, had multiple, compared with 1 in 7 (15% or 3,211) non-Indigenous people. These patterns are similar to multiple FDV stays: 1 in 5 (20%) Indigenous people who had at least one FDV stay had multiple, compared with 1 in 11 non-Indigenous (9%).

Figure 4.2: Assault hospital stays among the FDV group, by Indigenous status, 2010–11 to 2018–19, %



Notes

1. The number of assault hospital stays include those that occurred in 2018–19, where a person had a least one FDV stay from 2010–11 to 2017–18.

2. Data include acute care stays that occurred in public hospitals in New South Wales, Victoria, Queensland, South Australia, Tasmania, and the Australian Capital Territory.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S35.

Time between hospital stays

Similar to the length of time between FDV hospital stays, the most common timeframes between assault hospital stays was less than 1 year (58% of repeat assaults overall).

However, again, there was variation by year of assault hospital stay, with longer follow-up periods allowing more time for additional assaults to be recorded (Table 4.4).

Table 4.4: Length of time to next assault hospital stay (either FDV or other assault), among the FDV group

Year of hospital stay	Length of time between assault hospital stays						
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	Between 5 and 6 years	Over 6 years
2010–11	599	186	170	118	85	79	121
2011–12	702	221	156	119	107	105	71
2012–13	724	272	162	148	110	66	15*
2013–14	732	235	174	148	87	35*	n.a.
2014–15	748	230	172	121	38*	n.a.	n.a.
2015–16	748	268	143	59*	n.a.	n.a.	n.a.
2016–17	953	250	90*	n.a.	n.a.	n.a.	n.a.
2017–18	836	122*	n.a.	n.a.	n.a.	n.a.	n.a.
2018–19*	237*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
All	**6,279**	**1,784**	**1,067**	**713**	**427**	**285**	**207**

* Due to the cohort selection method, the number of assaults for 2018–19 includes only those cases where a person has had a prior FDV assault (from 2010–11 to 2017–18), and does not include all FDV assaults that occurred in 2018–19.

Notes

1. Includes assault hospital stays where a person has had an index FDV stay between 2010–11 and 2017–18.

2, This table presents data on the time between repeat assault hospital stays. It is calculated as the difference between the end of one assault stay and the start of the next, and is calculated for each additional assault hospital stay. Assault hospital stays include FDV hospital stays, as FDV are a subset of all assaults.

Source: AIHW analysis of the National Integration Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S39.

5 Perpetrators

This chapter examines the relationship to the perpetrator, for both FDV assault hospital stays, and other assault hospital stays. As discussed in Chapter 4, for an assault to be classified as FDV, the perpetrator needs to be recorded as a partner, parent, or other family member. Therefore, it is important to recognise that other assault hospital stays, particularly those where the perpetrator has been coded as unknown or unspecified, may include undisclosed FDV assaults. To examine this, this chapter also highlights the level of unknown or unspecified perpetrators for assault hospital stays among the matched comparison group (people who had a hospital stay in the same period, matched on age, sex, year of hospitalisation, Indigenous status and remoteness).

Key findings:

From 2010–11 to 2018–19:

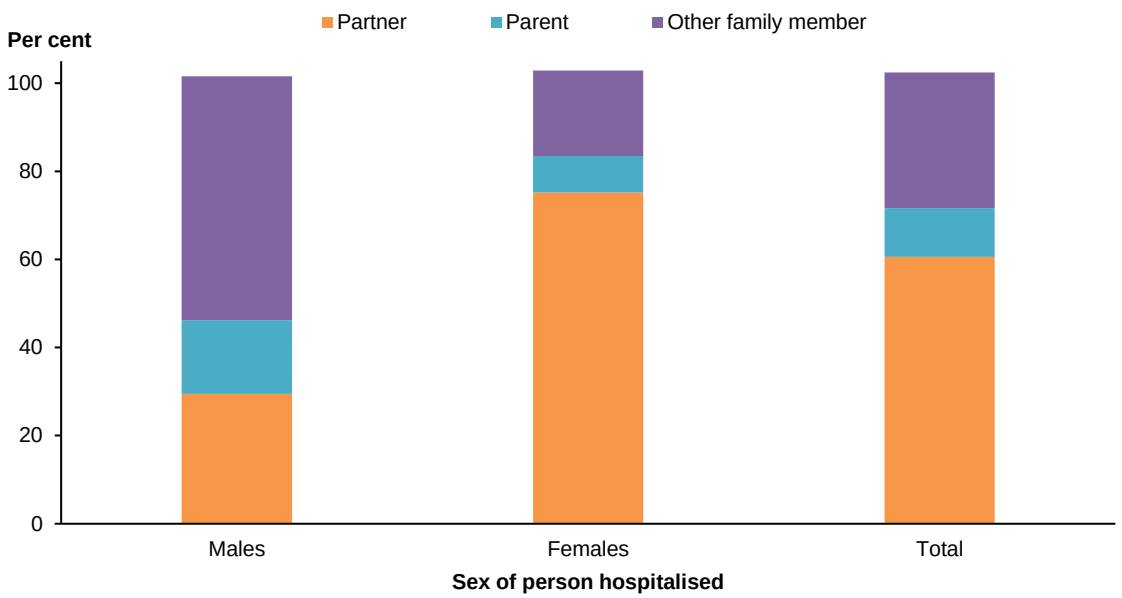
- Partners were responsible for the majority of FDV hospital stays (62%).
- Females were more likely than males to report a partner as the perpetrator (75% compared with 29%).
- Males were more likely than females to report 'other family member' as the perpetrator (55% compared with 19%).
- Partners were most often responsible for multiple FDV hospital stays (87% of people who had at least one hospital stay due to a partner, had multiple due to a partner).
- Among the FDV group, the majority of other assault hospital stays (73%) had a perpetrator that was unspecified.

Family and domestic violence hospital stays by relationship to perpetrators

Among those who had at least one hospital stay due to FDV, 61% had a perpetrator who was a partner, 31% had one who was another family member and 11% had a perpetrator who was a parent (Table 5.1). Data were similar when looking at the total number of stays; 62% of FDV hospital stays were due to a partner, 29% due to other family member, and 10% due to a parent (Table 5.1).

However, this varied by sex, with females more likely to report a partner perpetrator (75% of females), while males were more likely to report other family member (55% of males) (Figure 5.1).

Figure 5.1: People with at least one FDV hospital stay, by relationship to perpetrator and sex, %



Note: A single hospital stay may have multiple perpetrators recorded. Therefore the sum of perpetrators may be higher than the number of people with a FDV stay and the total does not equal 100%.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S41.

Table 5.1: Perpetrator types by total number of FDV hospital stays and people, 2010–11 to 2018–19

Perpetrator types	Number of Hospital stays	Number of people
	Sex of person hospitalised	
	Males	
Spouse or domestic partner	3,041	2,744
Parent	1,651	1,557
Other family member	5,643	5,151
Total	**10,300**	**9,306**
	Females	
Spouse or domestic partner	18,218	14,958
Parent	1,736	1,658
Other family member	4,231	3,859
Total	**24,116**	**19,904**
	Persons	
Spouse or domestic partner	21,259	17,702
Parent	3,387	3,215
Other family member	9,874	9,010
Total	**34,416**	**29,210**

Notes

1. The scope of this table is people with an index FDV hospital stay between 2010–11 and 2017–18.
2. Some people experienced more than one perpetrator type. Therefore the sum of the perpetrator types is greater than the total number of people.
3. Multiple perpetrators may be recorded in a single assault event. Therefore the sum of hospital stays for each perpetrator type is greater than the total number of hospital stays.

Sources: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; tables S41 and S42.

Of the 3,594 people who were hospitalised on more than one occasion due to FDV, 83% had the same type of perpetrator for all hospital stays, 17% had 2 different types of perpetrator, and less than 1% had 3 types of perpetrators (Table 5.2).

Table 5.2: Number of perpetrator types for people with more than one FDV hospital stay, 2010–11 to 2018–19

Number of perpetrator types	Number of people	%
1	2,967	83
2	612	17
3	15	0.4

Note: This table includes all people with an index FDV hospital stay between 2010–11 and 2017–18 and a repeat FDV hospital stay from 2010–11 to 2018–19.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S48.

Repeat family and domestic violence stays by relationship to perpetrators

Overall, among those who had multiple FDV stays, partners were responsible for the majority of FDV hospital stays. Of the 3,594 people who experienced multiple FDV hospital stays, 78% had one or more stays due to their partner, 32% had one or more due to 'other family member', and 7.2% had one or more due to a parent (note these do not sum to 100% as some people had multiple perpetrator types – see Table 5.2) (tables S45, S46, S47).

Further to this, partners were responsible for the majority of repeat stays. Of the 3,594 people who had repeat FDV stays, 2,809 had one or more due to a partner. Of these, 87% had multiple FDV stays due to a partner (with the remaining 13% having at least one other perpetrator account for their repeat FDV stay) (Table S45).

Of the 1,168 people who had at least one FDV stay due to 'other family member' (32% of the overall repeat cohort), 20% had multiple FDV stays due to this perpetrator type (Table S47).

Very few of the repeat cohort had at least one stay due to a parent (259), however, of these 55% had more than one FDV stay due to a parent (Table S46).

Total assault hospital stays by relationship to perpetrator

The 29,210 people who had at least one FDV hospital stay had a total of 39,972 assault hospital stays (of which FDV hospital stays accounted for 86%; Table 5.3). Conversely, of the 116,840 people in the comparison group, just 2,823 had an assault hospital stay, and they had a total of 3,605 assault stays (tables S44 and S52).

Among the FDV group, of the 5,556 other assault hospital stays, the majority (73%) had a perpetrator that was coded as 'unspecified'. Unknown/or other accounted for 21% and acquaintance/carer 16% (note that some assault stays have more than one perpetrator recorded and therefore these do not sum to 100%) (Table S43).

Similarly, among the 3,605 assault hospital stays for the comparison group, (70%) had a perpetrator that was coded as 'unspecified'. Unknown/or other accounted for 20% and carer or acquaintance 9.9%. This also means that some of these cases could be unidentified FDV cases (Table S44).

Table 5.3: Perpetrator types for assault hospital stays for the FDV and comparison groups, 2010–11 to 2018–19

	FDV group			Comparison group	
Perpetrator relationship	**Number of Hospital stays**	**% of total assaults**	**% of other assaults**	**Number of Hospital stays**	**% of total assaults**
			FDV assault		
Spouse or partner	21,259	53.2	..	..	..
Parent	3,387	8.5	..	..	..
Other family member	9,874	24.7	..	..	..
			Other assault		
Carer/Acquaintance or friend	870	2.2	15.7	355	9.8
Official authorities	45	0.1	0.8	45	1.2
Person unknown to the victim	321	0.8	5.8	220	6.1
Multiple persons unknown to the victim	404	1.0	7.3	269	7.5
Other specified person	466	1.2	8.4	229	6.4
Unspecified person	4,065	10.2	73.2	2,536	70.3
Total FDV assaults	*34,416*	*86.4*	*..*	*0*	*0*
Total other assaults	*5,556*	*15.4*	*100.00*	*3,605*	*100.00*
Total assaults	**39,972**	**100.00**		**3,605**	**100.00**
Cohort size	**29,210**			**116,840**	

Note: A single hospital stay may have multiple perpetrators recorded. Therefore, the sum of perpetrators does not equal the number of assault hospital stays.

Sources: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; tables S43 and S44.

6 Hospital stay patterns

This chapter examines the broader acute care hospital stay experiences among those who have had at least one hospital stay due to FDV. To assist with interpretation of these analyses, these results are presented alongside a comparision group, matched on age, sex, Indigenous status and remoteness area, who have had at least one hospital stay in the same 9-year period (but none due to FDV). Important to consider is that for both groups (and all types of conditions) a hospital stay is defined as any continuous period of acute hospital care, consistent with the methods used in chapters 3 to 5

The analysis is intended to provide a preliminary and overarching picture of acute care hospital stays across the 2 groups during the period; it does not include other types of hospital stays (such as rehabilitation) and therefore should be interpreted accordingly.

Key findings:

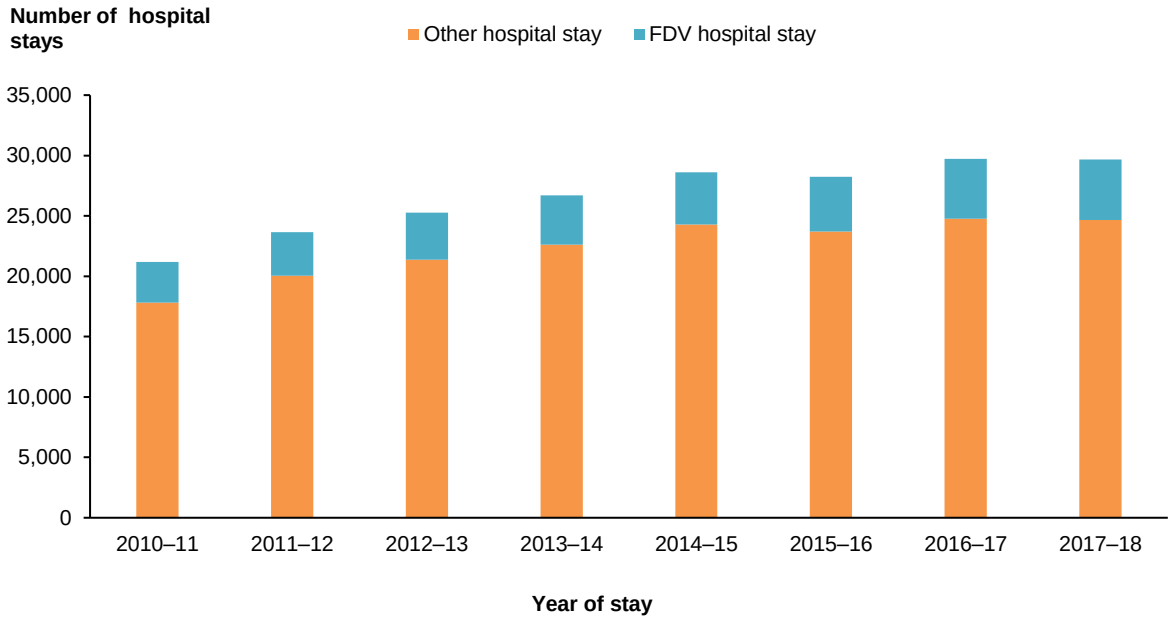
- People who had at least one FDV stay, had more hospital stays, on average, than the comparison group (8 acute care stays compared with 5).
- The most common principal diagnosis for the FDV group was *Injury and poisoning* (25% of hospital stays).
- The most common principal diagnosis for the comparison group was *Persons encountering health services for specific procedures and health care* (28% of hospital stays). This includes *Care involving dialysis*, which generally accounts for a large proportion of hospital separations nationally (AIHW 2019a).

Number of hospital stays

Consistent with research showing greater health service utilisation among those who experience FDV (Loxton et al. 2004; Rivara et al. 2007), people who had at least one hospital stay due to FDV had 8 acute care hospital stays, on average, compared with 5 among the comparison group (tables S50 and S52). This means people who had a FDV acute care hospital stay had 1.6 times as many acute care hospital stays over the 9 years to 2018–19, as the comparison group.

Of all hospital stays among the FDV group, FDV stays accounted for around 15–18% each year (Figure 6.1).

Figure 6.1: Number of hospital stays per year among the FDV group, by FDV stay status, 2010–11 to 2017–18



Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S11.

Characteristics of hospital stays

The principal diagnosis for which these groups were hospitalised varied (Table 6.1). The leading causes of hospitalisation for the FDV group was *Injury, poisoning and certain other consequences of external causes* accounting for 25% or 58,255 hospital stays. Of these, just over half (29,544) were classifed as FDV (Table S54). Among the comparision group, the most common principal diagnosis was *Persons encountering health services for specific produres and health care* (28% or 169,163 hospital stays) (Table S55). About 1 in 10 hospital stays among the FDV group were for *Pregnancy, childbirth and pureperium*, highlighting the risks to mothers of this type of violence. Hospitalisation for *Mental and behavioural* conditions was relatively more common among the FDV group (11% of all hospital stays) than the comparison group (4%), also highlighting the important connections between FDV and poor mental health.

Table 6.1: Top 10 principal diagnoses for all cause hospital stays for the FDV and comparison groups, 2010–11 to 2018–19

Rank	Principal diagnosis	Number	%
	FDV group		
1	Injury, poisoning and certain other consequences of external causes	58,255	24.6
2	Persons encountering health services for specific procedures and health care	26,776	11.3
3	Mental and behavioural	26,458	11.2
4	Pregnancy, childbirth and the puerperium	24,984	10.5
5	Symptoms, signs and abnormal clinical not elsewhere classified	23,727	10.0
6	Diseases of the digestive system	15,668	6.6
7	Diseases of the respiratory system	9,905	4.2
8	Diseases of the genitourinary system	8,880	3.7
9	Diseases of the circulatory system	6,003	2.5
10	Diseases of the musculoskeletal system and connective	5,954	2.5
	Comparison group		
1	Persons encountering health services for specific procedures and health care	169,163	28.2
2	Pregnancy, childbirth and the puerperium	79,685	13.3
3	Symptoms, signs and abnormal clinical not elsewhere classified	48,162	8.0
4	Injury, poisoning and certain other consequences of external causes	46,363	7.7
5	Diseases of the digestive system	43,733	7.3
6	Diseases of the genitourinary system	29,065	4.8
7	Mental and behavioural	25,932	4.3
8	Diseases of the respiratory system	25,832	4.3
9	Diseases of the circulatory system	18,314	3.1
10	Diseases of the musculoskeletal system and connective	17,541	2.9

Notes

1. The scope of this table is people with an index hospital stay between 2010–11 and 2017–18.
2. Principal diagnosis for a hospital stay is taken from the first hospital separation within a hospital stay.

Sources: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; tables S54 and S55.

7 Emergency department presentations

EDs are a vital part of Australia's health-care system; they provide care for people who require urgent, and often life-saving, medical attention.

This section presents high-level information on the use of EDs among people who have had at least one hospital stay for FDV, as well as the comparison group (people who had a hospital stay in the same period, matched on age, sex, year of hospitalisation, Indigenous status and remoteness). For this analysis, those presentations that resulted in a hospital admission are excluded as these hospital interactions are already counted in the hospital stay analyses presented in earlier chapters.

It is important to examine ED data for the FDV group to get a more complete picture of their hospital interactions, as available state data suggests fewer than 1 in 3 FDV-related emergency presentations result in an admission. In 2019–20, the majority of identified FDV ED presentations that occurred in Victorian hospitals resulted in the patient returning home (63%) with around 29% being transferred to a ward (Crime Statistics Agency 2021). These figures are similar to all cause ED presentations; nationally, 31% of emergency presentations ended with an admission to hospital (AIHW 2020b).

These data highlight the importance of examining both ED and admitted patient data in order to gain a better understanding of the impacts of FDV on both the individual and the hospital system.

Currently, ED presentations due to FDV cannot be identified in national data, as information on the external cause of injury is not available. Therefore, this section will include information on the broad patterns of ED presentations among those who had at least one FDV hospital stay (identified in the admitted patient care data set).

Key findings:

From 2010–11 to 2018–19:

- People who had at least one FDV hospital stay had 2 times as many ED presentations on average, as the comparison group (an average of 10 presentations per person, compared with 5).
- 87% of the FDV group had at least one ED presentation, compared with 72% of the comparison group.

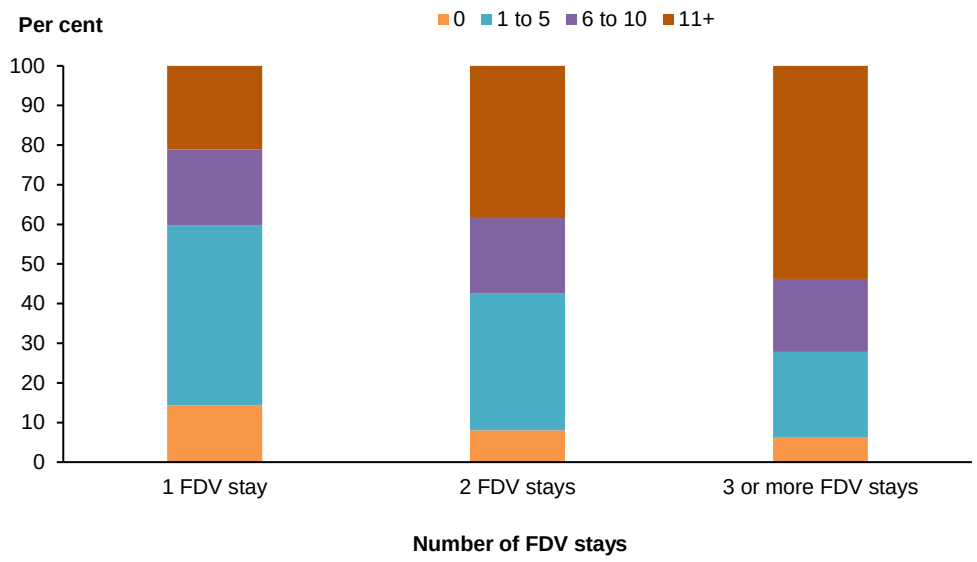
Number of emergency department presentations

People who had at least one FDV hospital stay had more ED presentations than the comparison group. Nearly 9 in 10 (87%) of the FDV group had at least one ED presentation (that did not result in a subsequent admission), compared with 7 in 10 (72%) of the comparison group (Table S57). Among those who had at least one ED presentation, those in the FDV group were more likely to have multiple ED presentations than the comparison group (87% compared with 73%), and the average number of presentations overall was 10 for the FDV group, compared with 5 among the comparison group.

Among the FDV group who had at least one ED presentation, 27% had over 10 ED presentations, compared with 11% among the comparison group.

People with multiple FDV stays had a higher number of ED presentations than people with one FDV stay. Over half (54%) of people with 3 of more FDV hospital stays had more than 10 ED presentations from 2010–11 to 2018–19, compared with 21% of those with one FDV stay (Figure 7.1)

Figure 7.1: Number of ED presentations by number of FDV stays, 2010–11 to 2018–19, %



Notes

1.The number of ED presentations includes only those that did not result in a hospital admission.

2. The number of FDV stays includes index FDV stays that occurred from 2010–11 to 2017–18 and any repeat stays that occurred from 2010–11 to 2018–19.

3. The number of ED presentations includes those that occurred from 2010–11 to 2018–19.

Source: AIHW analysis of the National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S58.

8 Deaths

The most severe outcome of FDV is death, and deaths due to FDV in Australia are becoming well recognised and publicised.

In 2018–19, there were 77 domestic homicide incidents in Australia (excluding the Australian Capital Territory) (Bricknell & Doherty 2021). Of these, 48 were intimate partner homicides with 73% occurring among females.

There is some variation from year to year. From 2010–11 to 2018–19 there were between 75 and 103 domestic homicides, and between 46 and 64 intimate partner homicides per year. Over this same time period, females were between 2.4 and 3.8 times as likely to be killed by an intimate partner per year as males (Bricknell & Doherty 2021).

Although these data examine deaths directly due to domestic homicide, little data exist more broadly around the risk of death due to any cause, among those who have experienced FDV hospitalisation. To fill this information gap, this chapter examines the number of people with at least one FDV hospital stay from 2010–11 to 2017–18 who had a registered death due to any cause (as listed in the National Death Index) from 2010 to 2019, and makes comparisons to those who have not had a FDV hospital stay. This is the only national source of data that can link experiences of FDV to all cause deaths. However, it is important to note that the cause of death may not be due to FDV.

These data also only refer to a hospitalised population, and not the population more broadly, and therefore do not capture deaths that occur among anyone who has experienced FDV.

For this analysis ICD-10 codes were classified into WHO-recommended disease groups (Becker et al. 2006), with minor Australian modifications (AIHW 2021c).

Key findings:

- From 2010 to 2019, 5.7% of the FDV hospital cohort died, compared with 4.4% of the comparison group.
- The FDV group were 10 times as likely to die due to assault, 3 times as likely to die due to accidental poisoning or liver disease, and 2 times as likely to die due to suicide, as the comparison group.
- The comparison group were more likely than the FDV group to die due to cancers: breast cancer (2.8 times), colorectal cancer (2.5) and lung cancer (2.0).

Number of deaths

Of the 29,210 people who had at least one FDV hospital stay, 5.7% or 1,674 died. Of the 116,840 in the matched comparison group (people who had a hospital stay in the same period, matched on age, sex, year of hospitalisation, Indigenous status and remoteness), 4.4% or 5,183 died. This means that those who had a hospital stay for FDV were 1.3 times as likely to die as those who had another type of hospital stay.

Cause of death

In addition to being more likely to have a death recorded, the causes of death among the FDV and comparison groups varied.

Cause of death was missing in 21% (or 351) of deaths among the FDV group, and 13% (or 680) of deaths among the comparison group (Table S64).

Cause of death information is missing in the NIHSI for 2 reasons.

Firstly, all cause of death information is missing in the most recent year of data (2019) as cause of death information was not available in the NDI at the time of linkage in the NIHSI. This relates to 292 deaths (17%) among the FDV group, and 613 deaths (12%) among the comparison group (Table S63).

Secondly, missing cause of death information (those in earlier years) may be due to ongoing coroner's investigations, which are later updated. Deaths are reported to a coroner under the following circumstances:

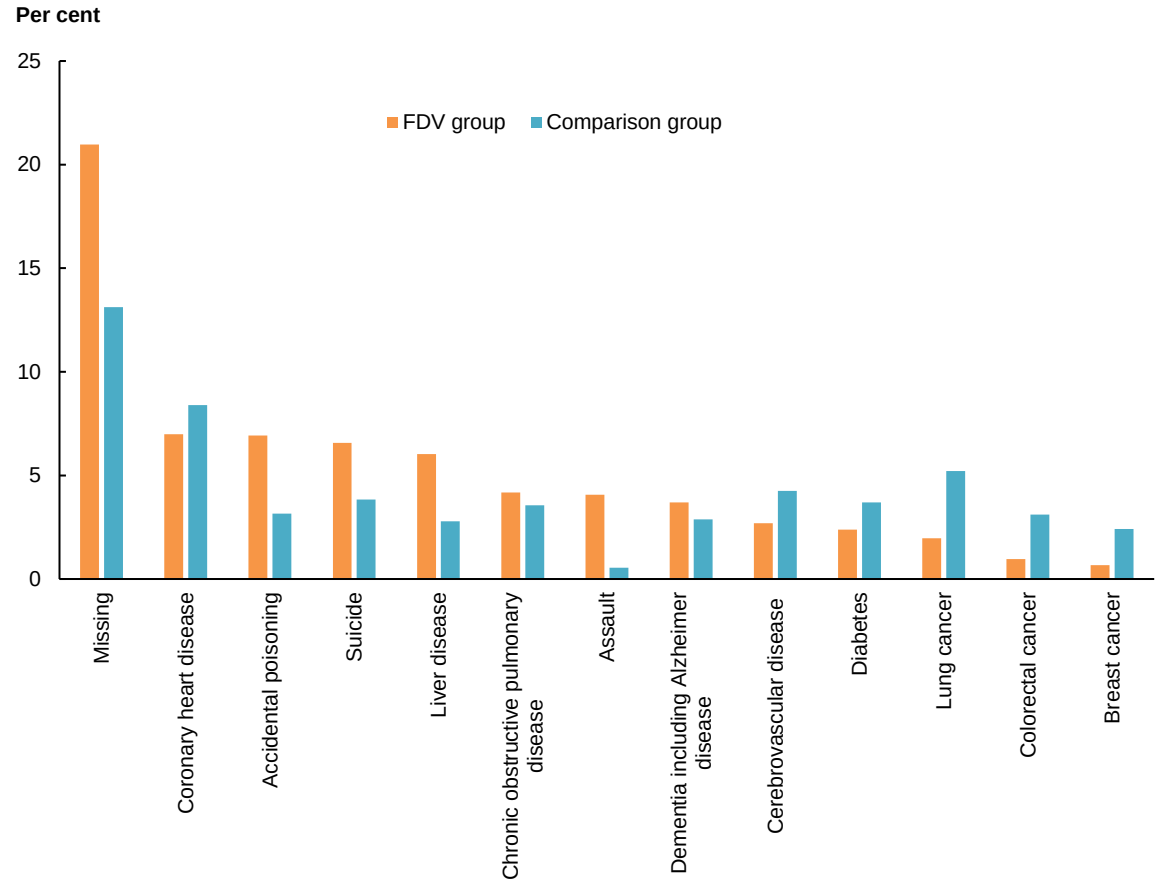
- the death is unexpected and the cause is unknown
- the person died in an unnatural or violent manner
- the death occurred during or as a result of an anaesthetic
- the death occurred to a person being 'held in care' or custody immediately before they died
- the identity of the person is unknown (AIHW 2021g).

Following missing, the most common cause of death for people with at least one FDV hospital stay was coronary heart disease (7.0% or 117), accidental poisoning (6.9% or 116) and suicide (6.6% or 110). The most common causes of death among the comparison group were coronary heart disease (8.4% or 835), lung cancer (5.2% or 270) and cerebrovascular disease (4.3% or 221) (Figure 8.1).

Not surprisingly, the FDV group were 9.7 times as likely as the comparison group to die due to assault, 2.8 times as likely to die by accidental poisoning and liver disease, and 2.2 times as likely to die due to suicide from 2010 to 2019 (Table S65).

In contrast, the comparison group were 2.8 times as likely to die due to breast cancer, 2.5 times as likely to die due to colorectal cancer and 2.0 times a likely to die due to lung cancer, as the FDV group. The leading causes of death among the comparison group largely align with Australian population cause of death statistics, where cancers, coronary heart disease are leading causes of death, particularly among those of the same age profile at death (AIHW 2021c).

Figure 8.1: Leading causes of death among the FDV and comparison groups, 2010–2019, %



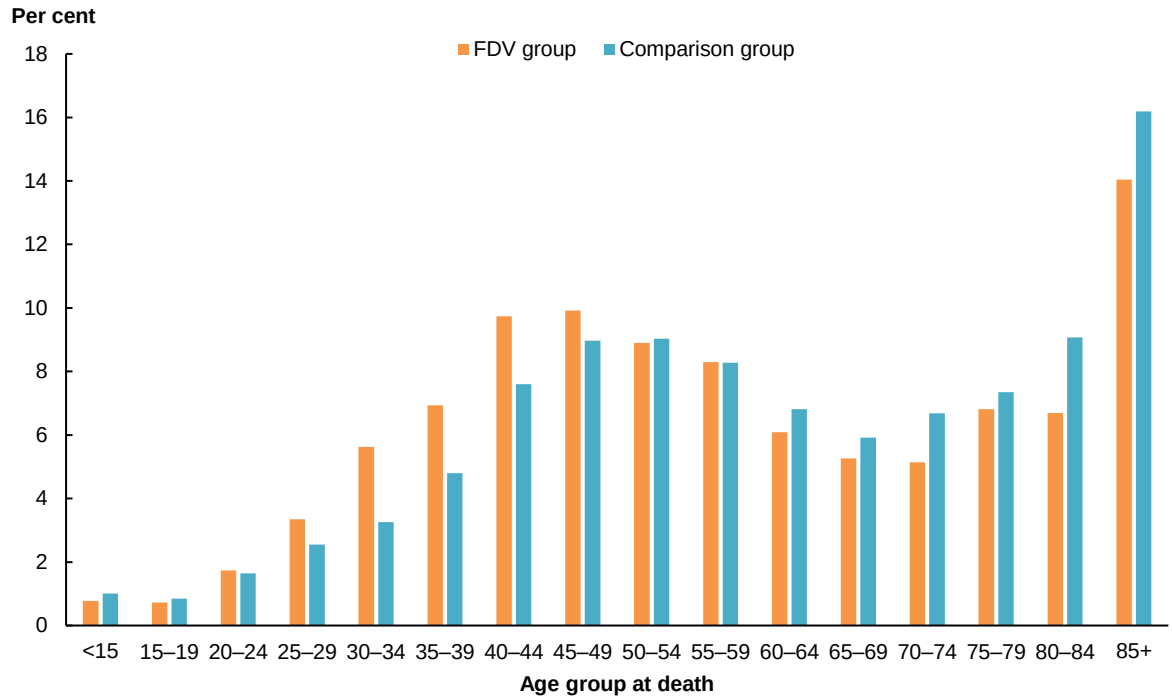
Note: Leading causes of death included in this figure are those which made up 2% or more of deaths within either the FDV or comparison group.

Source: AIHW analysis of National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S64.

Age at death

The FDV group were more likely to die at younger, than older ages, when compared with the matched comparison group (Figure 8.2). Almost 2 in 5 (39%) deaths among the FDV group occurred before age 50, compared with fewer than 1 in 3 (31%) among the comparison group (Table S66).

Figure 8.2: Age group at death for the FDV and comparison groups, 2010–2019, %



Source: AIHW analysis of National Integrated Health Services Information Analysis Asset (NIHSI AA) version 1.0; Table S66.

9 Future work

This project was the first to use national linked hospitals and deaths data to report on FDV in Australia. There is a range of related work which can be undertaken to improve the evidence base of family, domestic and sexual violence, including further analysis of the NIHSI AA, further development and analysis of national linked data, and potential development of existing national data collections.

Potential further analysis of the NIHSI AA

While this project covered many aspects related to FDV hospital stays, there are several areas of interest which could be further explored using the NIHSI AA to inform policy and programs designed to reduce FDV in Australia, through both the recognition of potential intervention points and those at risk of re-hospitalisation (Box 3).

Box 3: Potential further analysis of the NIHSI AA

The NIHSI AA is a longitudinal enduring, linked, data asset. Work is underway to enhance the NIHSI AA, to include data from all states and territories (Western Australia and the Northern Territory did not provide data for version 1.0). This would provide a more national view of the analysis and in particular assist in getting a better understanding of the experience of Indigenous populations.

Additional analyses of the NIHSI AA could be undertaken on people who have experienced at least one FDV hospital stay and their health service interactions, for example, examination of:

- principal diagnosis for ED presentations
- length of time between all cause hospital stays
- types and pathways of hospital stays and ED presentations related to conditions associated with FDV, such as mental health, drug and alcohol abuse
- all FDV-related hospital episodes of care (not just acute), which could be used to estimate the hospital-related costs of FDV and the longer-term individual impacts of FDV
- relationship between the number and types of injuries and subsequent deaths
- use of other health services, such as Medicare Benefits Schedule and Pharmaceutical Benefits Scheme services
- geographical areas, including remoteness and socioeconomic areas of individuals receiving services.

Differences between those who experience one FDV stay, and those who have multiple could also be determined.

Machine-learning techniques could also be utilised to create a risk assessment profile for hospital and ED presentations (that is, identification of potential types of cases to facilitate early intervention and/or flags for further investigation and assistance). Furthermore, analyses could be conducted to examine the health service contacts that occurred (or did not occur) prior to a FDV-related death. This could go beyond hospitals data and look at the use of Medicare Benefits Schedule and Pharmaceutical Benefits Scheme services.

Further development and analysis of national linked data

Work to develop a national integrated data asset, specific to FDSV, is currently underway. The long-term vision is to incorporate a range of health, welfare and justice data collections, so as to be able to provide a more complete picture and better understanding of the life experiences and outcomes of people experiencing FDSV, including victims and perpetrators. The asset could leverage the National Crime and Justice Data Linkage Project, which currently has a focus on people moving through the youth and adult justice system (www.abs.gov.au/ausstats/abs@.nsf/Lookup/1900.0main+features35Australia#Crime), and the data governance arrangements responsible for the NIHSI AA.

The capture of information about FDV in individual data collections, such as the National Hospital Morbidity Database, is important to identify the FDV cohort of interest for analysis. Improved capture of FDV information in other service-level data collections (for example, see 'Services responding to family and domestic violence' in Chapter 1) provides an opportunity to increase the capture of people who have experienced FDV, and provide a more comprehensive understanding.

Potential data development

Intervention points could be best served in ED interactions. This project showed that the FDV group had more interactions with EDs than the comparison group. However, as this report outlines, the national ED data collection currently captures information on injury as a principal diagnosis and there is no equivalent to the practice of the national admitted hospital data which captures information on the external cause of the injury (for example, assault), the place of occurrence and the activity underway when the injury occurred. The capture of cause of injury data in national ED data would enhance understanding of national hospital responses to FDV.

Some national work has been undertaken to explore options to capture FDV data in the national data and could inform future data development work.

Similarly, there could also be the opportunity to collect relevant information in the National Primary Health Care Data Asset, currently under development.

Appendix A

Table A.1: ICD-10-AM Assault codes

Assault 3-character code	Description
X85	Assault by drugs, medicaments and biological substances
X86	Assault by corrosive substance
X87	Assault by pesticides
X88	Assault by gases and vapours
X89	Assault by other specified chemicals and noxious substances
X90	Assault by unspecified chemical or noxious substance
X91	Assault by hanging, strangulation and suffocation
X92	Assault by drowning and submersion
X93	Assault by handgun discharge
X95	Assault by other and unspecified firearm discharge
X96	Assault by explosive material
X97	Assault by smoke, fire and flames
X98	Assault by steam, hot vapours and hot objects
X99	Assault by sharp object
Y00	Assault by blunt object
Y01	Assault by pushing from high place
Y02	Assault by pushing or placing victim before moving object
Y03	Assault by crashing of motor vehicle
Y04	Assault by bodily force
Y05	Sexual assault by bodily force
Y06	Neglect and abandonment
Y07	Other maltreatment
Y08	Assault by other specified means
Y09	Assault by unspecified means

Table A.2: Domestic violence helplines

Name of helpline	Number	Description
1800RESPECT	1800 737 732	Australia's national telephone and online counselling and support service for people affected or at risk of family, domestic and sexual violence, their family and friends and frontline workers.
Australian Childhood Foundation	1300 381 581	The Australian Childhood Foundation is a national charity which prioritises the safety and welfare of children. It provides counselling, advocacy, education, child abuse prevention programs and research.
Mensline	1300 78 99 78	A dedicated service for men with relationship and family concerns.
Relationships Australia	1300 364 277	Relationships Australia is a leading provider of relationship support services for individuals, families and communities

Sex

The data in this report is based on hospital admissions records. Patients' sex was recorded as ‘male’, ‘female’ or ‘other’.

Depending on the practices of the hospital, this may be based on what the patient selected, or how hospital staff completed the record. It may also be based on an existing hospital record for the patient, which may no longer reflect how they identify.

It is important to note that it is not known if the people completing these records interpreted ‘sex’ to mean sex at birth or gender identity.

This report uses the terms ‘males’ and ‘females’, but it should be noted this some participants may not identify with these terms.

Due to small numbers, results for people whose sex is recorded as ‘other’ are not available.

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Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ED	emergency department
FDSV	family, domestic and sexual violence
FDV	family and domestic violence
GP	general practitioner
NDI	National Death Index
NHMD	National Hospital Morbidity Database
NIHSI AA	National Health Services Integrated Analysis Asset
NNAPEDCD	National Non-admitted Patient Emergency Department Care Database
NSW	New South Wales
SHS	specialist homelessness services
WHO	World Health Organization

Symbols

—	nil or rounded to zero
. .	not applicable
n.a.	not available
n.p.	not publishable because of small numbers, confidentiality or other concerns about the quality of the data

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Related publications

The following AIHW publications relating to family, domestic and sexual violence might also be of interest:

- AIHW (2018) Family, domestic and sexual violence in Australia, 2018, AIHW, Australian Government. doi:10.25816/5ebcc144fa7e6
- AIHW (2019) Family, domestic and sexual violence in Australia: continuing the national story 2019, AIHW, Australian Government. doi:10.25816/5ebcc837fa7ea
- AIHW (2020) Sexual assault in Australia, AIHW, Australian Government.
- AIHW (2021) Family, domestic and sexual violence data in Australia, AIHW, Australian Government.

This report shows that from 2010–11 to 2017–18 there were 29,210 people who had at least one hospital stay due to family and domestic violence (FDV). Most people with a FDV hospital stay were female (68%) and most were aged 15–44. Partners were most commonly responsible for hospitalised FDV assaults.

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