

## Is domestic violence in NSW decreasing?

Karen Freeman

**Aim:** To examine changes in domestic and family violence victimisation in NSW.

**Method:** This is a descriptive study drawing upon data from crime victimisation surveys undertaken by the Australian Bureau of Statistics and recorded crime data from the NSW Police Force.

**Results:** Estimates from crime victim surveys provide evidence of a fall in the victimisation rate for physical domestic and family violence between 2010-12 to 2012-14 in NSW but no change from 2012-14 to 2014-16. There was no evidence of a change over this period in the proportion of victims reporting domestic and family violence to police. There is also evidence from police recorded crime of a statistically significant drop in the annual rate of domestic assault incidents occasioning grievous bodily harm from 5.8 per 100,000 in 2008/9 to 4.9 per 100,000 in 2015/16. Regional analysis showed that the rate of domestic violence occasioning grievous bodily harm was highest in the Far West and Orana region of NSW.

**Conclusion:** Both crime victim survey data and recorded crime data suggest that the victimisation rate for domestic and family violence has declined in NSW over the time period examined.

**Keywords:** domestic and family violence, victim, reporting rates, intimate partner violence.

### INTRODUCTION

Domestic and family violence (DFV) is well established as a focus area for criminal justice policy. It has been in the spotlight in NSW over recent years following the announcement in September 2015 of domestic violence as one of the NSW Premier's Priorities. A specific target was set; to reduce the rate of domestic violence perpetrators reoffending by 25 per cent by the year 2021. This target served to strengthen the focus on strategies developed under *It Stops Here: Standing Together to End Domestic and Family Violence in NSW* (NSW Government, 2014), a framework for reform to improve support services and safety for victims of domestic and family violence. In addition, new initiatives to change the behaviour of perpetrators of DFV were introduced and existing programs expanded. Data that can reliably reflect trends in DFV victimisation in NSW are essential to gauge recent trends and to monitor the impact of these new initiatives.

Two routinely collected data sources are used to examine physical DFV in NSW; recorded crime statistics and victim surveys. While both sources can provide valuable insights, they have limitations which preclude their use in isolation.

Recorded crime statistics provide the opportunity to examine trends in reported incidents of physical DFV and undertake regional comparisons, however only incidents reported to police are included. This is problematic as over half of people who experience domestic violence by a previous partner do not report the incident to police (ABS, 2017a). Therefore, police data are of little use in gauging the prevalence of DFV. Furthermore, as changes to trends in DFV may be influenced by victims' willingness to report incidents to police, trends in recorded crime for domestic violence incidents must be considered with caution. However, where we have reason to believe the willingness to report incidents of DFV remains constant, police data can give us valuable information about trends and be used for regional comparisons. As willingness to report DFV increases for victims requiring medical attention for injuries sustained during the incident (Grech & Burgess, 2011) police data are most reliable where we are dealing with incidents involving significant injury (e.g. domestic violence assaults occasioning grievous bodily harm (DVGBH)).

Victim surveys have the advantage of reaching victims regardless of their level of engagement with the criminal justice system. The annual national victimisation survey *Crime*

*Victimisation, Australia*, is the most comprehensive crime victim survey in Australia. Conducted by the ABS, this survey uses standardised questions and methodology which enables victimisation rates to be compared over time.<sup>1</sup> However, victim surveys rely on data from a representative sample of respondents in order to generate reliable population estimates. Where the prevalence of victimisation is relatively low for segments of the population that are of interest, large samples are necessary to generate reliable population estimates. For example, if the victimisation rate is 2 per cent, using a random sample of survey respondents we will only obtain victimisation data from two of every 100 respondents to the survey. If we are interested in further analysis of particular segments of the victim population, the sample is reduced even further and the reliability of the estimates can become problematic.

The sample size used for *Crime Victimisation, Australia*, is large enough to examine trends in the prevalence of physical violence in NSW and the data from this survey reveals a significant reduction in the victimisation rate for physical violence, from 2.8 per cent of the population in 2008/2009 (95% CI 2.38, 3.21) to 2.0 per cent in 2015/16 (95% CI 1.63, 2.37) (ABS, 2017b). However, until now, we have been unable to use the annual survey data to determine if a similar reduction in DFV physical violence has occurred in NSW over the same period because of the number of NSW respondents to the survey in a given year is too small. This report pools survey data across several years to obtain a clearer picture of trends in the prevalence of DFV trends in NSW.

The ABS survey data provides information about the prevalence of DFV. An individual is counted only once even if they have been assaulted multiple times during the observation period. One advantage of police data is that it allows us to look for a change in the number of DFV incidents. In addition to analyzing survey data, therefore, I also examine trends in the number of incidents of DVGBH recorded by police. This 'triangulation' approach provides the most reliable means of determining whether, and to what extent, domestic violence has declined in NSW. A regional analysis of DVGBH is also presented.

## AIM

The aim of this descriptive study is to examine trends in DFV in NSW from July 2008 to June 2016 using both victim survey data and recorded crime data. Specifically, I consider whether there has been a change over this period in the rate (per 100,000 population) of victims of physical DFV as well as the proportion of victims of physical DFV reporting the incident to police. I also undertook a regional analysis of rates of DVGBH in NSW.

## METHOD

### Data Sources

This study draws on data from two sources. The first is an ABS customised report using a subset of data collected by the ABS for *Crime Victimisation, Australia* from 2008-09 to 2015-16

(ABS, 2018).<sup>2</sup> The second is recorded crime data extracted from the NSW Police Force's (NSWPF) Computerised Operational Policing System (COPS).

The *Crime Victimisation, Australia* (ABS, 2017b) data collection is based on a national household survey conducted each financial year, which asks respondents about their experiences of personal and household victimisation in the past 12 months.<sup>3</sup> During 2015/16, the total sample size for the crime victimisation survey was 37,699 respondents, with 28,276 (75%) respondents answering all questions in the survey. Further details of the sampling used in each of the surveys can be found in the explanatory notes of each issue of *Crime Victimisation, Australia* (ABS, 2017b).

The survey data used in this report restricts its focus to experiences of physical violence in the 12 months prior to the survey. Physical violence is classified as 'intimate partner violence' if the respondent indicates that the perpetrator was a current spouse/partner, ex-spouse/ex-partner, current boy/girlfriend, ex-boy/girlfriend, and 'family violence' if the offender was a family member. In this report physical DFV includes both intimate partner and family violence.

The data, collected over eight consecutive surveys, were 'pooled' into two financial year periods, resulting in four data periods: 2008-10, 2010-12, 2012-14 and 2014-16.<sup>4</sup> Each of these data periods represents the average estimate across the years of the pooled data rather than an estimate for the total period or a single year. The relative standard errors for the data were used to calculate 95% confidence intervals (CI), meaning that we can be 95% confident that the actual population mean falls within this range. Where comparisons of estimates over time or between populations are made, the standard errors for the differences were calculated and 95% CIs of the differences between the estimates are used to determine whether any observed differences are statistically significant.

The recorded crime data used in this report includes assault GBH incidents flagged in COPS as 'Domestic Violence' related. The NSWPF flag domestic assault in accordance with the *Crimes (Domestic and Personal Violence) Act 2007*.<sup>5</sup> The time period examined is from 1 July 2008 to 30 June 2016. Statistical testing of trends for recorded crime data were performed using Kendall's rank-order correlation test on monthly data.

For the presentation of regional data for DVGBH I pooled the five most recent years of data (2013 to 2017) into broad geographic regions of NSW called Statistical Areas. This was necessary due to the low incidence of DVGBH at a regional level.

## RESULTS

### Estimated victims of physical DFV

Respondents to the victim survey who indicate that they experienced a physical assault in the past 12 months are asked about their relationship to the offender involved in the most recent incident of assault.<sup>6</sup> Based on the survey data, it is

estimated that in 2015/16, 31,800 people in NSW experienced at least one incident of physical DFV in the past 12 months. This equates to 524.9 victims per 100,000 population.

Figure 1 shows the estimated 12-month physical DFV victimisation rate per 100,000 for both NSW and Australia. Physical DFV rose in NSW between 2008-10 and 2010-12 but then fell sharply from 2012-14 with a further small reduction from 2012-14 to 2014-16. The CIs for the estimates are available in the Appendix. Table 1 shows the difference between consecutive data periods in physical DFV victimisation rates for both NSW, and Australia, and the associated CIs. This table shows that the fall in physical DFV victimisation rates in NSW between 2010-12 and 2012-14 was statistically significant. It is interesting to note, however, that there was no statistically significant change in the national victimisation rate for physical DFV during the same period. Figure 1 also shows the victimisation rate in NSW was lower than Australia for the last two data periods, although comparison of the CIs reveals the difference was only significant for 2014-16 (-180.5; 95% CIs (-304.5, -56.4)).

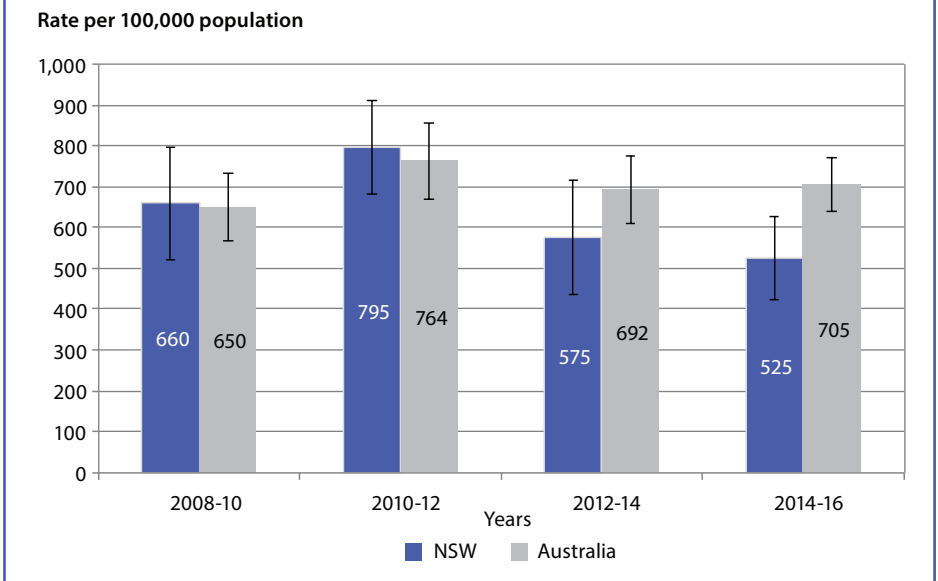
### Rate of reporting DFV assaults

The key advantage of population-based victim surveys over recorded crime is that they are not affected by victim willingness to report assault to police. In fact, we can use them to estimate the proportion of victims that report the crime to the police and compare changes in reporting over time and across jurisdictions. Respondents to the *Crime Victimization, Australia* survey who indicate that they have experienced an incident of physical assault in the last 12 months are asked whether that incident was reported to the police.

Figure 2 plots the proportion of victims experiencing physical DFV who reported the last incident to the police, for each of the four data periods examined.

At first glance it appears that the estimated proportion of victims of physical DFV reporting the last incident to the police in NSW was stable over the

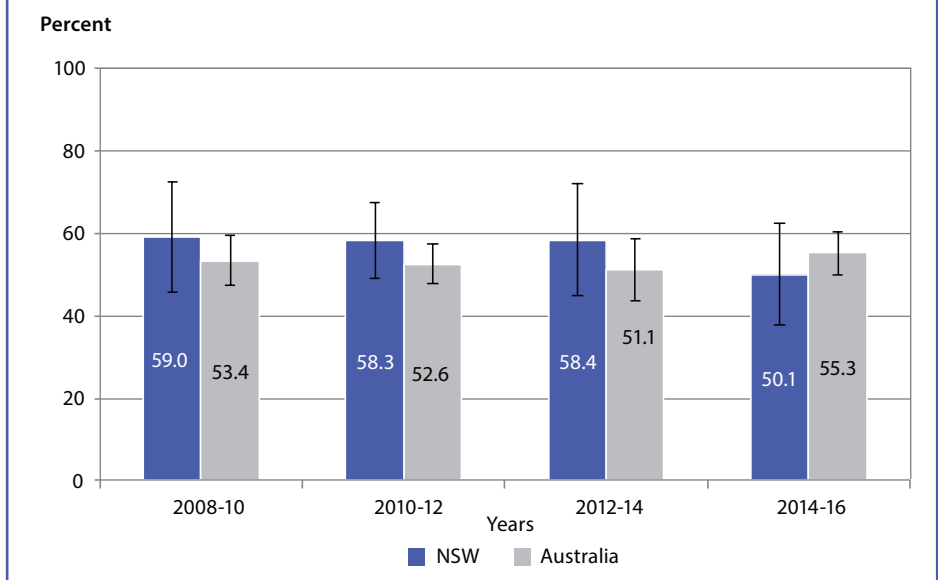
**Figure 1. Estimated physical DFV victimisation rate per 100,000 population, with 95% confidence intervals, NSW and Australia**



**Table 1. Difference from previous data period for physical DFV victimisation rate per 100,000 population, NSW and Australia**

Year	NSW		Australia	
	Difference in DFV victimisation rate (95% CI)	Standard error of difference	Difference in DFV victimisation rate (95% CI)	Standard error of difference
2010-12	135.7 (-44.4 - 315.8)	91.9	114.0 (-11.2 - 239.2)	63.9
2012-14	-220.6 (-401.72 - -39.5)	92.4	-71.8 (-197.0 - 53.4)	63.9
2014-16	-49.7 (-223.8 - 124.4)	88.8	13.5 (-94.5 - 121.4)	55.1

**Figure 2. Proportion of victims of physical DFV, reporting last incident to police, with 95% confidence intervals, NSW and Australia**



first three data periods then fell between 2012-14 and 2014-2016. However, the overlapping CIs shown in Figure 2 indicate that these estimates are not statistically different from each other. Table 2 presents the difference in estimated reporting rates in NSW between consecutive data periods and the associated CIs, confirming that there were no statistically significant changes in the reporting rate over the time periods examined. The stable reporting rates over the study period, seen in the NSW data, can also be seen for reporting rates for Australia. The CIs for the estimates are available in the Appendix.

### Recorded Crime

Turning to recorded crime data, an examination of DVGBH incidents shows a decline from 5.8 incidents per 100,000 population in 2008/9 to 4.9 per 100,000 in 2015/16. Figure 1 shows the annual rate of DVGBH incidents for the eight-year period. A Kendall's rank-order correlation test of deseasonalised monthly data shows that the fall in the incident rate per 100,000 population was statistically significant, ( $\tau = -0.196, p = 0.005$ ).<sup>7</sup>

While this finding provides evidence of a reduction in domestic assaults over the time period examined, we are unable to tell from the police data whether this reduction is due to a change in prevalence (percent of the population who are victims), a change in the number of incidents per victim, or both.

### Regional differences in domestic assault

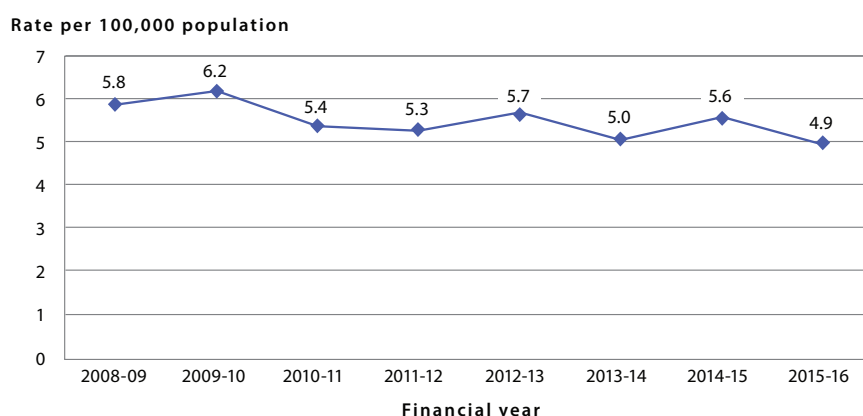
While the two data sources examined so far suggest a reduction in domestic assault in recent years, the rate of serious assault in some areas of NSW still remains very high. Table 3 shows the total number of incidents of DVGBH recorded by police between 2013 and 2017 and the rate per 100,000 population by Statistical Area. Note that, because of the low number of DVGBH incidents per month in each region, analysis of trends over time is not viable.

From Table 3 we can see that the Far West and Orana Statistical Area has a rate of DVGBH that is more than double

**Table 2. Difference from previous data period of estimated reporting rate for most recent physical DFV incident, NSW**

Year	Difference in estimated reporting rate (95% CI)	Standard error of difference
2010-12	-0.7 (-16.9 - 15.5)	8.3
2012-14	0.1 (-16.4 - 16.6)	8.4
2014-16	-8.3 (-26.6 - 10.0)	9.4

**Figure 3. Number of domestic assault incidents occasioning GBH per 100,000 population, NSW, 2008-09 – 2015-16**



**Table 3. Incidents of domestic assault occasioning grievous bodily harm, by Statistical Area, 2013 to 2017**

Statistical Area	Rate per 100,000	Number of incidents
Far West and Orana	139.6	163
New England and North West	52.7	98
Murray	43.3	51
Riverina	40.7	65
Mid North Coast	37.5	81
Sydney - Blacktown	37.4	131
Coffs Harbour - Grafton	34.6	48
Central West	33.7	71
Sydney - City And Inner South	31.7	107
Sydney - Outer West and Blue Mountains	27.9	88
Richmond - Tweed	27.7	68
Sydney - Parramatta	27.6	129
Central Coast	26.8	90
Sydney - South West	25.6	108
Hunter Valley Excluding Newcastle	25.2	68
Sydney - Outer South West	23.4	63
Sydney - Inner South West	22.9	137
Illawarra	22.4	68
Southern Highlands and Shoalhaven	20.6	31
Newcastle and Lake Macquarie	20.5	76
Capital Region	20.1	45
Sydney - Inner West	15.2	47
Sydney - Eastern Suburbs	14.4	41
Sydney - Sutherland	14.2	32
Sydney - North Sydney and Hornsby	8.0	34
Sydney - Northern Beaches	7.9	21
Sydney - Baulkham Hills and Hawkesbury	6.8	16
Sydney - Ryde	4.2	8
<b>Total NSW</b>	<b>25.6</b>	<b>1985</b>

that of the second highest Statistical Area, New England and North West Statistical Area, and five times higher than the rate for NSW. Far West and Orana Statistical Area not only has the highest rate over the five-year period, but also the highest number of DVGBH incidents. Other regions, such as Inner South Western Sydney, have a high number of incidents (137) but a relatively lower rate (22.9 per 100,000) due to the high population in that Statistical Area.

## DISCUSSION

This report set out to provide a better understanding of recent trends in DFV in NSW by triangulating results from two data sources; crime victim survey data and police recorded crime data.

Trends in DFV victimisation rates emerging from these different datasets are broadly consistent over the time period examined. Examination of victim survey data showed a reduction in the rate of DFV victimisation from 2010-12 to 2012-14, followed by a stabilization of the rate over the more recent four-year period. There was no evidence of a similar reduction in DFV victimisation rates at the national level. The survey data also showed that the proportion of victims reporting physical DFV to the police remained stable. Recorded crime data showed a statistically significant decrease in the rate of DVGBH from 5.8 per 100,000 in 2008/9 to 4.9 per 100,000 in 2015/16. Having more than one data source pointing to a reduction in the rate of DFV victimisation over the eight-year period examined increases our confidence that there has been a 'real' change in the prevalence of DFV in NSW.

Regional comparison of domestic assaults GBH shows that despite these statewide declines, some areas of NSW are still experiencing very high rates of DFV. The five Statistical Areas with the highest rates of DVGBH were all located outside the Sydney region, with the rate in the Far West and Orana Statistical Area more than double the rate of any other region. Among the metropolitan regions, Blacktown Statistical Area had the highest rate of DVGBH.

While the results of this study provide welcome evidence that the rate of DFV victimisation has reduced over the period examined, the reasons for this reduction are unclear. The observed reduction in the rate of DFV victimisation pre-dates initiatives introduced under the Premier's Priority and *It Stops Here: Standing Together to End Domestic and Family Violence in NSW Domestic Violence Strategy* reforms. Moreover, given the time required to implement new initiatives, it was not expected that the data available for this study would reflect any changes attributable to these reforms. The finding is, however, useful for providing context in which these initiatives were introduced.

Limitations of crime victim surveys should be acknowledged. While this report adopted a methodology of pooling data to increase the sample size in order to reduce the size of the relative standard errors, analyses of the smaller subset of DFV data still produced point estimates with wide ranges.

It should be noted that sampling and methodological limitations may underestimate the prevalence of DFV in victim surveys. Respondents to the *Crime Victimization, Australia* survey may be unwilling to report incidents of violence if the perpetrator is present or in close proximity during the time of interview. In addition, persons who have sought temporary accommodation in hotels and refuges to escape DFV are also excluded from the sample of respondents. While these limitations may affect the victimisation rate, they are unlikely to affect trends over time.

Finally, the current analysis was restricted to only four data periods due to methodological changes to the survey prior to 2008, rendering earlier data incomparable. This study points to the value of continuing to use victim survey data to monitor NSW trends in DFV and the rate of reporting DFV to police as more data becomes available.

The examination of both recorded crime and victim survey data in this report demonstrates the importance of using multiple data sources to better understand trends in victimisation, particularly in relation to offences that remain largely hidden from official records.

## ACKNOWLEDGEMENTS

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## NOTES

1. The ABS also conducts the survey, *Personal Safety, Australia*, focusing specifically on experience of personal violence. This survey is conducted every four years and uses different data collection methodology, questions and definitions to *Crime Victimization, Australia*.
2. This report is based on data collected in surveys conducted between the financial years 2008/09 and 2015/16. Changes to the methodology used for the administration of the survey means that survey data pre-2008 are not comparable with data post-2008. The data used in this report are derived from a customised data request (ABS Customised report, 2018).
3. The ABS Crime Victimization Survey is conducted as part of the Multipurpose Household Survey (MPHS) and is undertaken throughout Australia each financial year as part of a supplement to the ABS's monthly Labour Force Survey (LFS). The survey is restricted to persons aged 15 years and over, and people living in non-private dwellings are excluded (e.g. Hotels, hospitals, inmates of prisons, residents of other institutions). Households selected to complete in the LFS are initially contacted by mail. Respondents to the Crime Victimization Survey must be members of a household completing the LFS and are selected at random. Respondents are asked about their experience of selected personal and household crimes in the last 12 months, selected details of the incident

including their relationship to the perpetrator, and whether they reported the incident to the police. The interviews are conducted either by telephone or face-to-face, with the majority of interviews conducted over the phone.

4. The two-year period refers to two financial years. As such 2008-10 refers to data from surveys conducted from July 2008 to June 2010 and 2010-12 refers to data from surveys conducted from July 2010 to June 2012.
5. The *Crimes (Domestic and Personal Violence) Act 2007* defines a person as having a domestic relationship with another person if they are: a spouse/partner, ex-spouse/ex-partner, parent/guardian (including step/foster), child (including step/foster), sibling or other members of family (including kin).
6. It should be noted that when asked about the relationship between the victim and offender, only the relationship for the last incident of violence is included. Therefore DFV victimisation rates using the ABS Crime Victimization Survey data may underestimate actual DFV victimisation, as it will exclude persons who were victims of DFV but had more recent incident of non-DFV prior to responding to the survey.

7. DVGBH data shows seasonal variation with higher incident counts recorded in summer months. To deal with this issue the DVGBH monthly rates were first deseasonalised before undertaking a Kendall's Trend test.

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## APPENDIX

**Table A1. Estimated physical DFV victimisation rate per 100,000 population, NSW and Australia**

Year	NSW		Australia	
	Physical DFV victimisation rate per 100,000 population (95% CI)	Standard error	Physical DFV victimisation rate per 100,000 population (95% CI)	Standard error
2008-10	659.5 (521.2 - 797.8)	70.6	649.7 (565.7 - 733.8)	42.9
2010-12	795.2 (679.9 - 910.6)	58.8	763.7 (670.9 - 856.5)	47.3
2012-14	574.6 (435.0 - 714.3)	71.3	691.9 (607.8 - 776.0)	42.9
2014-16	524.9 (421.0 - 628.8)	53.0	705.4 (637.6 - 773.1)	34.6

**Table A2. Reporting rate for physical DFV incident, NSW and Australia**

Year	NSW		Australia	
	Estimated reporting rate (95% CI)	Standard error	Estimated reporting rate (95% CI)	Standard error
2008-10	59.0 (45.7-72.3)	6.8	53.4 (47.2-59.6)	3.2
2010-12	58.3 (49.0-67.6)	4.7	52.6 (47.7-57.5)	2.5
2012-14	58.4 (44.8-72.0)	6.9	51.1 (43.7-58.5)	3.8
2014-16	50.1 (37.8-62.4)	6.3	55.3 (50.1-60.5)	2.7

**Table A3. Estimated number of victims of physical DFV assault, NSW**

Year	Estimated number	Standard error	(95% CI)
2008-10	37,200	3,980.4	29,398.4 - 45,001.6
2010-12	46,300	3,426.2	39,584.6 - 53,015.4
2012-14	34,100	4,228.4	25,812.3 - 42,387.7
2014-16	31,800	3,211.8	25,504.9 - 38,095.1