

Criminal offences involving firearms in New South Wales, 1995-2011

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Aim: To investigate trends over time, spatial patterns, and characteristics of criminal offences involving firearms.

Method: This study used data from the NSW Police Force Computerised Operational Policing System and the Australian Bureau of Statistics. Characteristics and spatial patterns of offences involving firearms were described and trends across 1995 to 2011 were analysed using Kendall's rank-order correlation test.

Results: The number of incidents involving a firearm declined (48% between 1995 and 2011). Robbery involving a firearm decreased (51%, 1995-2011) and unlawfully discharge firearm decreased (24%, 1995-2011), although discharge firearm into premises increased (144%, 1995-2011). The rate of shoot with intent incidents per 100,000 population in Sydney was greater than the rest of NSW. The average age of male offenders was 24.2 years for robbery, 26.6 years for murder and attempted murder, 30.9 years for assault, and 36.5 years for harassment involving firearms in 2011. Homicide, assault, abduction and kidnapping, and harassment involving firearms occurred mostly in residences in 2011. Robbery involving firearms occurred mostly in business/commercial premises. The rate of firearm theft was lower in Sydney than the rest of NSW in 2011 (0.8 and 6.4 per 100,000 population, respectively). Firearms were most frequently stolen from residences (79%, 2011). Rifles were the most stolen firearm (66%, 2011).

Conclusion: Despite the recent upward trend in drive-by shootings, the long-term trend in criminal offences involving firearms is down.

Keywords: Australia, drive-by, gun crime, handguns, shootings, Sydney, temporal trend, violence, weapons

INTRODUCTION

The spate of shootings in Sydney at the end of 2011 and the beginning of 2012 brought offences involving firearms to public attention. These shootings led to a number of alarming headlines at the time, including: 'City feels heat from just a few gun crime hot spots' (Sydney Morning Herald, 11 February 2011); 'Five Sydney shootings in four hours as police probe bikie gang turf war link' (Sydney Morning Herald, 17 April 2012); 'Wild west rocked by spree of shootings' (The Telegraph, 17 April 2012); 'In the firing line over jump in drive-by shootings' (Liverpool Leader, 18 April 2012); and 'Gun violence plagues Sydney's streets' (The Telegraph, 20 April 2012).

There is no doubt that the number of drive-by shootings has increased in recent times. In the 24 months to December 2011, the NSW Bureau of Crime Statistics and Research's (BOCSAR's) data show that there was a 41 percent increase in drive-by shootings, formally known as *discharge firearm into premises* (from 71 incidents in 2010 to 100 incidents in 2011). However,

it is important to bear in mind that most of these incidents were targeted at a small number of houses in a geographically confined area of western and south-western Sydney. The total number of criminal incidents involving firearms recorded in 2011 is also well below the number of incidents recorded in 2001 (down 56%). While this does not diminish the seriousness of the recent spate of shootings, it is important to contextualise the recent firearm activity in terms of long-term trends in these offences.

The aim of this paper is to investigate the characteristics of firearm involvement in criminal offences and the theft of firearms in NSW. This aim will be addressed with the following questions:

1. What proportion of violent incidents involve firearms and how does this vary by offence type?
2. Has the number of incidents where firearms were involved changed over time and how does this vary by offence type and geographical location?

3. What is the average age of offenders involved in offences involving firearms and how does this vary by offence type?
4. On what premises types do offences involving firearms most commonly occur and how does this vary by offence type?
5. Where have firearms been stolen from in recent years and what type of firearms are stolen?

This report updates and extends the previous research of Fitzgerald, Briscoe and Weatherburn (2001) and Williams and Poynton (2006) in describing the temporal trends, spatial patterns, and characteristics of the most prevalent offences involving firearms.

METHOD

STUDY SAMPLE

Data were sourced from the NSW Police Force Computerised Operational Policing System (COPS) for the period 1995 to 2011. COPS contains recorded criminal incident data for all incidents reported to or detected by police in NSW¹. Incidents were identified as offences involving a firearm if they (a) involved violence and police recorded a firearm in the modus operandi field on COPS or (b) if a firearm was, by definition, involved in the incident (e.g., *unlawfully discharge firearm*). The category firearm was further disaggregated to all firearms and handguns (incorporating handguns and revolvers). To identify where and what types of firearms have been stolen most frequently in recent years, offences of theft where the object of theft was a firearm were identified for 2009 to 2011.

VARIABLES

The following variables were extracted from COPS to identify trends and patterns in offences involving firearms:

- **Offence type:** To investigate trends over time and spatial patterns in offences involving firearms, offences of *murder; attempted murder; robbery; assault; shoot with intent to murder; shoot with intent other than to murder; unlawfully discharge firearm; and discharge firearm into premises*² were extracted. To investigate the premises types in which offences involving firearms occur, offences of *homicide; abduction and kidnapping; and harassment, threatening behaviour and private nuisance* were extracted. To investigate the characteristics of stolen firearm objects, offences of *theft* were extracted.
- **Weapon type:** To identify what proportion of violent incidents involve firearms, the number of incidents involving firearms and other weapon types was extracted from COPS. Firearms were defined as fixing guns/ramset guns, machine guns, revolvers, rifles, shotguns, spear guns, and other firearms. The other weapons included knives, rocks, iron bars, hammers, syringes, glass, and other weapons.
- **Year:** The year the incident was reported.
- **Location:** The location of the incident by NSW Statistical Divisions (SDs) or Sydney Statistical Subdivisions (SSDs).
- **Offender age:** Age in years of the person of interest (POI). This variable includes all POIs within each incident

type therefore if there was more than one POI per incident they are all counted. Similarly, if a POI was involved in more than one incident involving firearms they are counted more than once.

- **Premises:** The premises type in which incidents were recorded to have occurred.
- **Object of theft:** Type of stolen firearm object.

ANALYSIS

To identify what proportion of violent incidents involve firearms and how the proportion varies by offence type (research question 1), descriptive analyses were used to determine the number and proportion of different weapons involved in offences of violent crime in 2011.

To identify whether the frequency of offences involving firearms has changed over time and how this varies by offence type and geographic location (research question 2), Kendall's rank-order correlation tests (see Conover, 1980; Siegel, 1956) were carried out on the monthly number of incidents for offences involving firearms recorded by NSW Police from 1995 to 2011. Long-term (17-year), medium-term (5-year) and short-term (2-year) trends were examined. The percentage change between the first and the most recent year was calculated for significant trends ($p < .05$).

To identify whether the age of offenders varies by offence type, the average age of male offenders for offences where the modus operandi was a firearm (research question 3) were described. Data for 2011 were examined. The age of female offenders was not examined because the number of female offenders involved in offences involving firearms was too small to calculate reliable estimates.

To identify the premises types upon which offences involving firearms most commonly occur (research question 4), descriptive analyses were used to determine the proportion of incidents of *homicide; assault; abduction and kidnapping; robbery; and harassment and threatening behaviour and private nuisance* involving a firearm (other than a handgun) or a handgun. Data for 2011 were examined.

To identify what types of firearms are stolen and from where they are stolen (research question 5), descriptive analyses were used to examine the rate of incidents in which one or more firearm objects were stolen per 100,000 population by geographic location in 2011. Additionally, the premises type from which firearms were stolen across 2009 to 2011; and the types of firearm objects stolen across 2009 to 2011 were described.

RESULTS

1. What proportion of violent incidents involve firearms and how does this vary by offence type?

Table 1 lists the types of weapons involved in *murder* (measured by the number of victims), *attempted murder*, *robbery*, and *assault* incidents in NSW, 2011. *Murder* and *attempted murder* usually involved a weapon (59.7% and 85.1%, respectively),

Table 1. Weapons involved in murder, attempted murder, robbery and assault in NSW, 2011

Type of weapon	Murder victims		Attempted murder incidents		Robbery incidents		Assault incidents	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Firearm ¹	11	14.3	24	51.1	361	7.4	154	0.2
Knife ²	26	33.8	12	25.5	1,025	21.1	1,736	2.6
Rock ³	0	0.0	0	0.0	15	0.3	208	0.3
Iron Bar ⁴	4	5.2	0	0.0	107	2.2	792	1.2
Hammer ⁵	2	2.6	2	4.3	35	0.7	121	0.2
Syringe	0	0.0	0	0.0	36	0.7	22	0.0
Glass	0	0.0	0	0.0	58	1.2	726	1.1
Other weapon ⁶	3	3.9	2	4.3	69	1.4	296	0.4
All weapons	46	59.7	40	85.1	1,706	35.1	4,055	6.1
No weapon recorded	31	40.3	7	14.9	3,148	64.9	62,298	93.9
Total	77	100.0	47	100.0	4,854	100.0	66,353	100.0

¹ The weapon category 'firearm' includes fixing guns/ramset guns, machine guns, revolvers, rifles, shotguns, spear guns, and other firearms

² The weapon category 'knife' includes knives, swords, scissors, and screwdrivers

³ The weapon category 'rock' includes rocks, bricks, stones, and missiles

⁴ The weapon category 'iron bar' includes iron bars, clubs, and pipes

⁵ The weapon category 'hammer' includes hammers, spanners, and wrenches

⁶ The weapon category 'other weapon' includes boomerangs, bow and arrows, crossbows, blow guns, oleoresin capsicum spray, other prohibited weapons/dangerous articles, ropes, wire, and whips

while fewer incidents of *robbery* and *assault* involved a weapon (35.1% and 6.1% of incidents, respectively). *Murder* and *attempted murder* involved firearms in 14.3 percent and 51.1 percent of incidents, respectively. Firearms were the most common weapon type involved in incidents of *attempted murder*. Knives were more often involved in murders than firearms (33.8% and 14.3%, respectively). *Robbery* and *assault* incidents also involved firearms less often than knives, with 7.4 percent of *robbery* involving firearms versus 21.1 percent of *robbery* involving knives and 0.2 percent of *assault* involving firearms versus 2.6 percent involving knives.

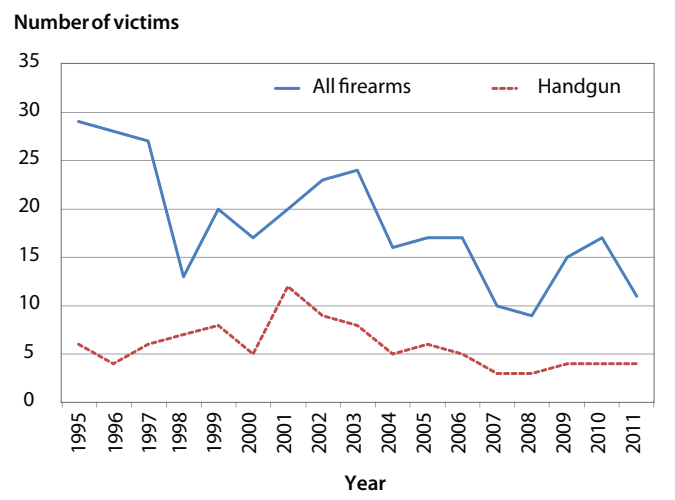
2. Has the number of incidents where firearms were involved changed over time and how does this vary by offence type and geographical location?

In this section the trends over time in *murder* involving a firearm, *robbery* involving a firearm, *shoot with intent, unlawfully discharge firearm, discharge firearm into premises*, and all criminal offences where the modus operandi was a firearm are analysed across 17 years, 1995 to 2011. Spatial patterns in the rate of *shoot with intent* incidents per 100,000 population across NSW SDs, and the proportion of *shoot with intent* incidents in selected Sydney SSDs and the rest of NSW are described across 17 years, 1995 to 2011.

Murder involving a firearm

Figure 1 shows the number of victims of *murder* involving a firearm and, of these, the number of victims of *murder* involving a handgun in NSW from 1995 to 2011. Figure 1 shows that 29 people were victims of *murder* involving a firearm in 1995. The number of victims had fallen to 13 by 1998, this was followed by an increase to 24 in 2003, before a fluctuating decline to 11 in 2011. The number of victims of *murder* involving a handgun fluctuated across 1995 to 2011, peaking with 12 victims in 2001.

Figure 1. Recorded victims of murder involving a firearm and murder involving a handgun in NSW, 1995 to 2011

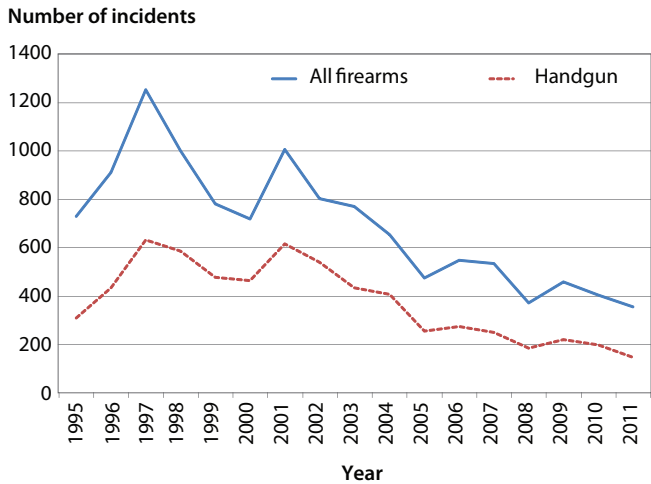


For 5 years from 2007 to 2011, *murders* involving handguns remained low, with three to four victims per year. Statistical analyses were not carried out on these data due to the small number of *murders* involving a firearm in NSW every year.

Robbery involving a firearm

Figure 2 shows the number of incidents of *robbery* involving a firearm and *robbery* involving a handgun in NSW from 1995 to 2011. A peak in the number of *robbery* incidents involving a firearm occurred in 1997, with 1,252 incidents in that year. The number then steadily decreased to a low of 361 in 2011. Overall, *robbery* involving a firearm significantly decreased across 1995 to 2011 ($p < .001$), a decline of 50.7 percent between 1995 and 2011. There was also a significant downward trend (33.0%) over the 5 years to December 2011 ($p = .007$). The 2-year trend was stable ($p = .619$).

Figure 2. Recorded incidents of robbery involving a firearm and robbery involving a handgun in NSW, 1995 to 2011

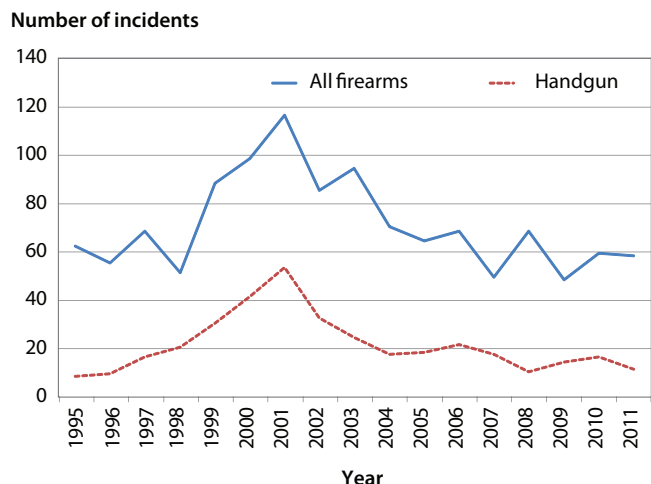


A similar pattern was observed for robbery involving a handgun. Consistent with robbery involving any type of firearm, there was a peak in 1997 of 635 incidents involving a handgun, followed by a decrease in 2011 to 152. Overall, there was a decline of 51.6 percent between 1995 and 2011 ($p < .001$), and a decline of 40.2 percent between 2007 and 2011 ($p = .002$). The 2-year trend in robbery involving a handgun was stable ($p = .194$).

Shoot with intent

Figure 3 shows the total number of incidents of shoot with intent and the number of incidents of shoot with intent involving a handgun recorded by police from 1995 to 2011. There was an increase from 63 to 117 incidents of shoot with intent between 1995 and 2001. This was followed by a steady decline to 59 incidents in 2011. Overall there was no significant upward or downward trend across the 17 years ($p = .062$), 5 years ($p = .831$), or last 2 years ($p = .821$). Similarly, for incidents involving a handgun there was no significant change in the trend across the 17 years ($p = .153$), 5 years ($p = .562$), or last 2 years ($p = .281$).

Figure 3. Recorded incidents of shoot with intent and shoot with intent involving a handgun in NSW, 1995 to 2011



Spatial patterns in shootings

Figure 4 shows the rate of shoot with intent incidents per 100,000 population in Sydney SD, the rest of NSW, and all of NSW across 17 years, 1995 to 2011. The rate of shoot with intent incidents in Sydney was consistently higher than the rest of NSW. The rate peaked for Sydney with 2.3 incidents per 100,000 population in 2001. The shoot with intent incident rate peaked for the rest of NSW with 1.2 shooting incidents per 100,000 population in 2000. The rate peaked at its second highest for Sydney with 2.0 incidents per 100,000 population in 2003. From 2004 to 2011, the rate of shootings remained relatively stable for Sydney, fluctuating between 0.9 to 1.2 incidents per 100,000 population. The rate across the rest of NSW ranged between 0.3 and 1.0 incidents per 100,000 population across 2004 to 2011.

Figure 4. Rate of shoot with intent incidents per 100,000 population in Sydney Statistical Division, the rest of NSW, and all of NSW, 1995 to 2011

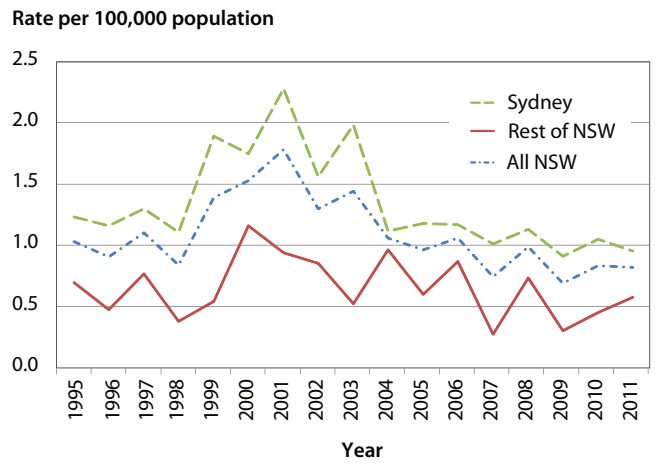
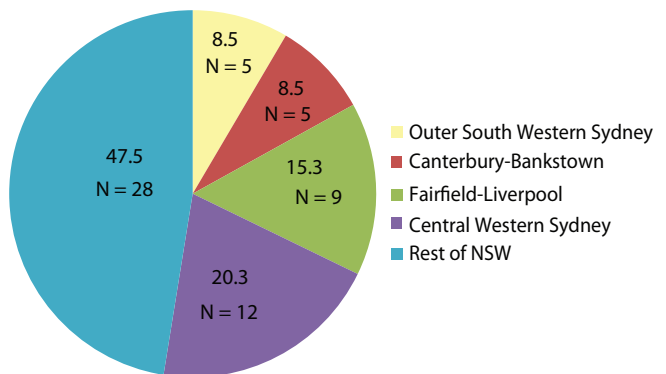


Figure 5 shows the proportion of shoot with intent incidents occurring in four Sydney SSDs and the rest of NSW. The selected Sydney SSDs were Outer South Western Sydney, Canterbury-Bankstown, Fairfield-Liverpool, and Central Western Sydney.

Figure 5. Proportion of shoot with intent incidents in selected Sydney Statistical Subdivisions and the rest of NSW, 2011 (N=59)



Note. The rest of NSW encompasses all of NSW state excluding the four Sydney SSDs presented (Outer South Western Sydney, Canterbury-Bankstown, Fairfield-Liverpool, and Central Western Sydney).

Figure 6. Recorded incidents of unlawfully discharge firearm and discharge firearm into premises in NSW, 1995 to 2011

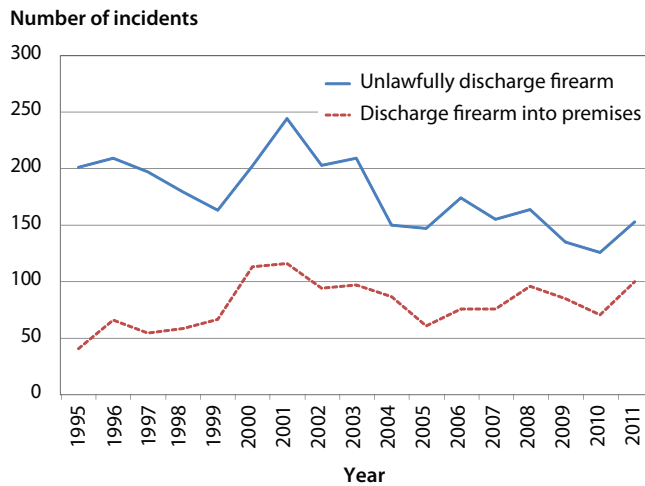
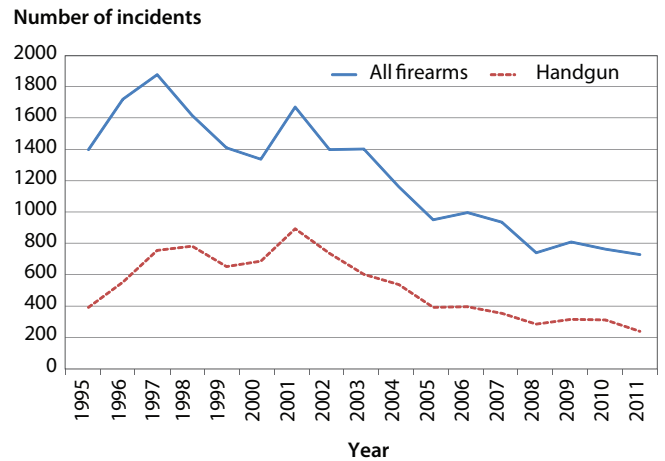


Figure 7. All recorded criminal incidents involving a firearm and all criminal incidents involving a handgun in NSW, 1995 to 2011



Bankstown, Fairfield-Liverpool and Central Western Sydney. These were chosen because they had the greatest number of *shoot with intent* incidents in Sydney SD in 2011. The rest of NSW encompassed all of NSW, excluding the Sydney SSDs named above. Together, these four Sydney SSDs encompassed over half of all *shoot with intent* incidents in NSW (52.5%). Central Western Sydney showed the greatest proportion of incidents with over one fifth of all *shoot with intent* incidents in NSW (20.3%). This was followed by Fairfield-Liverpool with 15.3 percent of incidents.

Discharge firearm

Figure 6 shows the number of incidents of *unlawfully discharge firearm* and the number of incidents of *discharge firearm into premises* recorded from 1995 to 2011. There were 201 incidents of *unlawfully discharge firearm* in 1995. This rose to 244 in 2001 before a steady, albeit fluctuating, decline to 147 in 2005 and then to a low of 126 in 2010. There was a downward trend in the number of incidents of *unlawfully discharge firearm* across the 17 years ($p < .001$) and a decline of 23.9 percent between 1995 and 2011. Trends were stable across the 5 ($p = .278$) and 2 ($p = .132$) most recent years of the measurement period.

There were 41 incidents of *discharge firearm into premises* in 1995 and this rose to 100 incidents in 2011. Peaks were observed in 2000 and 2001 with 113 and 116 incidents, respectively. There was a significant increase in the number of incidents of *discharge firearm into premises* across the 17-year period ($p = .002$), with an increase of 143.9 percent between 1995 to 2011. The 5-year trend was stable ($p = .215$) but there was a significant upward trend across the 2 years to December 2011 ($p = .013$), with a 40.9 percent increase between 2010 and 2011.

All criminal incidents involving a firearm

Figure 7 shows the total number of criminal incidents where a firearm was recorded in the modus operandi field on COPS from 1995 to 2011. Criminal offences involving a firearm peaked with 1,877 incidents in 1997 followed by a decrease to 1,338 in 2000, a jump to 1,670 in 2001 before a clear decline to 727 in 2011, the lowest in 17 years. Overall, all incidents involving

firearms have shown a downward trend across the 17 years analysed ($p < .001$), a decline of 48.0 percent between 1995 to 2011. The downward trend was maintained for all firearms ($p = .006$) across the five most recent years of the period examined. The overall number of criminal incidents involving firearms declined by 22.2 percent between 2007 and 2011. The trend for criminal incidents involving any firearm was stable ($p = .636$) from 2010 to 2011.

Criminal incidents involving handguns showed a similar downward trend to all criminal incidents involving a firearm. Whilst there was an increase from 393 incidents in 1995 to 892 incidents in 2001, there was a decrease to 239 incidents in 2011 ($p < .001$), a decline of 39.2 percent between 1995 and 2011. The downward trend for handguns continued ($p = .006$) across the 5 most recent years examined, with a 32.7 percent decline between 2007 and 2011. This decrease was maintained ($p < .050$) between 2010 and 2011, with a decline of 23.2 percent.

3. What is the average age of offenders involved in offences involving firearms and how does this vary by offence type?

Table 2 shows the average age of male offenders involved in offences involving firearms in 2011. *Murder* and *attempted murder* offences had a mean offender age of 26.6 years. *Robbery* with a firearm had an average male offender age of 24.2 years. Male offenders involved in *assault* involving a firearm were 30.9 years, and offenders involved in *harassment threatening behaviour and private nuisance* involving a firearm were 36.5 years old.

4. On what premises types do offences involving firearms most commonly occur and how does this vary by offence type?

Table 3 shows the proportions of premises types in which incidents of *homicide; assault; abduction and kidnapping; robbery; and harassment, threatening behaviour and private nuisance* involving a firearm (other than a handgun) or involving a handgun occurred in 2011.

Table 2. Descriptive statistics of age of male offenders involved in offences involving firearms

Offence involving a firearm	No.	%	Age (years)				
			Mean	Median	Min.	Max.	s.d.
Murder and attempted murder	25	7.1	26.6	25.0	20.0	39.0	7.9
Robbery	228	65.1	24.2	23.0	15.0	45.0	7.0
Assault	71	20.3	30.9	26.0	14.0	83.0	15.6
Harassment, threatening behaviour and private nuisance	26	7.4	36.5	32.5	15.0	79.0	17.0

Homicide involving firearms most commonly occurred in residential premises, with 71.4 percent of incidents involving firearms (other than handguns) and 75.0 percent of incidents involving handguns occurring in residential premises. The next most common premises type was outdoor/public places (Table 3).

The majority of *assault* incidents occurred in residential premises, with 55.7 percent of incidents involving firearms (other than handguns) and 48.7 percent of all incidents involving handguns in residential premises. The next most common premises type was outdoor/public places (Table 3).

Similar patterns to *homicide* and *assault* were found for *abduction and kidnapping*, and *harassment, threatening behaviour and private nuisance* offences. Although there were few *abduction and kidnapping* incidents in 2011 (N = 18), residential premises harboured 63.6 percent of all incidents involving firearms (other than handguns). However, only

14.3 percent of *abduction and kidnapping* incidents involving handguns occurred in residential premises. Of *harassment, threatening behaviour and private nuisance*, 70.8 percent of incidents involving firearms (other than handguns) and 57.9 percent of incidents involving handguns occurred in residential premises (Table 3).

The majority of *robbery* involving a firearm occurred in business/commercial premises with 45.9 percent of all incidents involving firearms (other than handguns) and 44.7 percent of all incidents involving handguns. This was followed by licensed premises and outdoor/public places (Table 3).

5. Where have firearms been stolen from in recent years and what type of firearms are stolen?

In this section, characteristics of recent firearm theft in NSW were investigated across 3 years, 1 January 2009 to 31 December 2011.

Table 3. Proportion of recorded criminal incidents of homicide; assault; abduction and kidnapping; robbery; and harassment, threatening behaviour and private nuisance involving a firearm (other than a handgun) and a handgun by premises type in NSW, 2011

Premises type	Homicide		Assault		Abduction and kidnapping		Robbery		Harassment, threatening behaviour and private nuisance	
	Firearms other than handguns	Handgun	Firearms other than handguns	Handgun	Firearms other than handguns	Handgun	Firearms other than handguns	Handgun	Firearms other than handguns	Handgun
	N = 28 (%)	N = 8 (%)	N = 115 (%)	N = 39 (%)	N = 11 (%)	N = 7 (%)	N = 209 (%)	N = 152 (%)	N = 48 (%)	N = 19 (%)
Business/commercial	7.1	0.0	6.1	15.4	0.0	57.1	45.9	44.7	4.2	10.5
Outdoor/public place	14.3	25.0	32.2	30.8	27.3	28.6	14.4	22.4	16.7	21.1
Recreation	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Utilities	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Industrial	7.1	0.0	0.9	0.0	0.0	0.0	1.0	2.6	0.0	0.0
Adult entertainment	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.6	0.0	5.3
Residential	71.4	75.0	55.7	48.7	63.6	14.3	9.6	8.6	70.8	57.9
Carpark	0.0	0.0	2.6	0.0	9.1	0.0	1.9	0.7	2.1	0.0
Education	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	5.3
Health	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Law enforcement	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Licensed premises	0.0	0.0	0.0	5.1	0.0	0.0	22.5	16.4	6.3	0.0
Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Public transport	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.3	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Incidents where at least one firearm was stolen in Sydney SSDs and NSW SDs

In 2011, a total of 640 firearms were stolen in 203 incidents of firearm theft in NSW. Of this total, 167 firearms were stolen in 36 incidents in the Sydney SD. The number of incidents in which at least one firearm object was stolen was largely similar across 2009 to 2011.

Table 4 shows the number and rate per 100,000 population of incidents in which one or more firearm objects was stolen, by NSW SDs in 2011. The rate of incidents involving one or more stolen firearms was lower in Sydney SD than in the rest of NSW (0.8 vs. 6.4 per 100,000 population, respectively). The North Western SD had the greatest rate of incidents involving one or more stolen firearms in 2011 (19.6 per 100,000 population). This was followed by the Northern SD (14.7 per 100,000 population) and the Murray SD (10.5 per 100,000 population).

Table 4. The number and rate of incidents in which at least one firearm* was stolen per 100,000 population, by NSW Statistical Divisions, 2011

Location	No.	Rate per 100,000 population ^a	Population
Hunter	19	3.0	643,108
Illawarra	14	3.3	430,186
Richmond-Tweed	8	3.4	236,557
Mid-North Coast	25	8.1	306,822
Northern	27	14.7	183,171
North Western	23	19.6	117,347
Central West	18	9.8	182,791
South Eastern	11	5.1	214,791
Murrumbidgee	10	6.5	154,273
Murray	12	10.5	114,533
Far West	0	-	21,976
Sydney	36	0.8	4,605,913
Rest of NSW	167	6.4	2,605,555
NSW Total	203	2.81	7,211,468

Note. * Firearm includes rifle, air rifle, air pistol, pistol, shotgun, blank fire pistol, other firearm, machine gun, shortened rifle, firearm not seen, revolver, firearm not described, replica firearm, barrel, double rifle, single barrel shotgun, coachgun single short barrel, under and over 2-barrel shotgun, side by side 2-barrel shotgun and coachgun double short barrel.

^a Caution should be used when comparing rates when incident numbers are small.

Premises type of stolen firearms

Table 5 shows the types of premises from which firearms were stolen in NSW from 2009 to 2011. Across each of these years, the vast majority of firearms were stolen from residential premises (82.0% in 2009, 85.7% in 2010, and 78.8% in 2011).

Type of firearm stolen

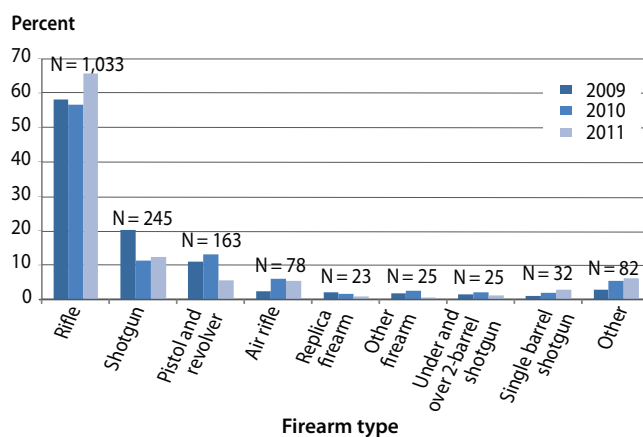
Figure 8 shows the types of firearms stolen from 2009 to 2011. Rifles were by far the most common firearm type stolen, accounting for 65.8 percent of all firearms stolen in 2011. This was followed by shotguns (12.3% in 2011), 'other' firearms

Table 5. Premises types in which at least one firearm* was stolen, 2009 to 2011

Premise type	2009	2010	2011
	N = 211 (%)	N = 203 (%)	N = 203 (%)
Residential	82.0	85.7	78.8
Outdoor/public place	5.2	2.5	3.4
Business/commercial	2.8	3.0	4.9
Carpark	2.4	0.5	1.0
Industrial	1.9	0.5	1.0
Rural industry	1.9	7.9	5.9
Recreation	0.9	0.0	0.5
Law enforcement	0.9	0.0	0.0
Education	0.5	0.0	0.0
Licensed premise	0.5	0.0	1.5
Marine transport	0.5	0.0	0.0
Public transport	0.5	0.0	0.0
Vehicle	0.0	0.0	2.5
Firearm premises	0.0	0.0	0.5
Total	100.0	100.0	100.0

Note. * Firearm includes rifle, air rifle, air pistol, pistol, shotgun, blank fire pistol, other firearm, machine gun, shortened rifle, firearm not seen, revolver, firearm not described, replica firearm, barrel, double rifle, single barrel shotgun, coachgun single short barrel, under and over 2-barrel shotgun, side by side 2-barrel shotgun and coachgun double short barrel.

Figure 8. Types of firearms stolen in NSW, 2009 to 2011



Note. Firearm type 'other' encompasses air pistol, firearm not described, side by side 2-barrel shotgun, blank fire pistol, barrel, double rifle, coachgun single short barrel, coachgun double short barrel, tranquilising rifle, paintball gun, firearm not seen, combination rifle/shotgun.

(6.1% in 2011), pistols and revolvers (5.5% in 2011), and air rifles (5.3% in 2011).

SUMMARY

With the exception of *attempted murder*, firearms are not frequently involved in violent criminal offences in NSW. Firearms were recorded in 51 percent of *attempted murder* incidents, but only 14 percent of *murder* involved firearms, 7 percent of *robbery* incidents involved firearms and less than 1 percent of *assault* incidents involved firearms in 2011.

Most categories of crime involving firearms have decreased or stayed stable since 1995. There have been particularly marked falls in the number of *robbery* incidents involving a firearm. These offences peaked in 1997 where 1,252 incidents were recorded. By 2011 this had fallen to 361 incidents. The exception to this general downward trend is the number of incidents of drive-by shootings (*discharge firearm into premises*), which more than doubled from 41 incidents in 1995 to 100 incidents in 2011.

Shooting offences tend to occur more frequently in metropolitan areas. From 1995 to 2011, the rate of *shoot with intent* incidents per 100,000 population in Sydney SD was consistently higher than the rate in the rest of NSW. In 2011 the greatest number of *shoot with intent* incidents in Sydney SSDs occurred in Outer South Western Sydney, Canterbury-Bankstown, Fairfield-Liverpool, and Central Western Sydney SSDs. These four SSDs accounted for more than half of all *shoot with intent* incidents in NSW.

For offences involving firearms, male offenders of *murder* and *attempted murder* were on average 27 years, male offenders of *robbery* were 24 years, male offenders of *assault* were 31 years, and male offenders of *harassment, threatening behaviour and private nuisance* were 37 years. The majority of *homicide, assault, abduction and kidnapping*, and *harassment, threatening behaviour and private nuisance* incidents involving a firearm occurred in residential premises followed by outdoor/public places, in 2011. The majority of *robbery* involving a firearm occurred in business/commercial premises followed by licensed premises in 2011.

Descriptive analyses on where firearms were stolen from and the type of firearms stolen suggest the rate of incidents where one or more firearm object was stolen per 100,000 population was lower in Sydney than in the rest of NSW in 2011. Firearms were more often stolen from residential locations across 2009 to 2011, and rifles, followed by shotguns, were the most commonly stolen firearm objects across 2009 to 2011.

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NOTES

- 1 It should be noted that not all firearm incidents are reported to, or detected by, the police. Further, police might not record the involvement of weapons in the commission of some offences. Therefore, data used herein may be an underestimate of the actual extent of firearm involvement in violent crime. However, if we assume that the amount of missing data does not vary greatly or systematically over time or across areas, police-recorded data should provide an accurate estimate of temporal and spatial patterns in these offence categories.
- 2 *Murder* incidents include incidents categorised by police as 'murder – actual'. *Attempted murder* incidents include police categories of 'murder – attempted' and 'shoot with intent to murder'. *Robbery* incidents include police categories of 'robbery without a weapon', 'robbery with a firearm', and 'robbery with a weapon not a firearm'. *Assault* incidents include police categories of 'actual bodily harm', 'grievous bodily harm (including malicious wounding)', 'common assault, shoot with intent other than to murder', and 'spike drink/food'. *Shoot with intent* incidents include police categories of 'shoot with intent to murder' (a subcategory of homicide), and 'shoot with intent other than to murder' (a subcategory of assault).

REFERENCES

- Conover, W.J. (1980). *Practical Non-Parametric Statistics*. New York: John Wiley and Sons.
- Fitzgerald, J., Briscoe, S., & Weatherburn, D. (2001). *Firearms and violent crime in New South Wales* (Contemporary Issues in Crime and Justice No. 57). Retrieved from NSW Bureau of Crime Statistics and Research website: [http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/cjb57.pdf/\\$file/cjb57.pdf](http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/cjb57.pdf/$file/cjb57.pdf)
- NSW Bureau of Crime Statistics and Research. (2012). *Recorded Crime Statistics 2011*. Retrieved from [http://www.bocsar.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/RCS2011.pdf/\\$file/RCS2011.pdf](http://www.bocsar.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/RCS2011.pdf/$file/RCS2011.pdf)
- Siegel, S. (1956). *Nonparametric statistics for the behavioural sciences*. Pennsylvania: McGraw-Hill.
- Williams, S., & Poynton, S. (2006). *Firearms and violent crime in New South Wales, 1995-2005* (Contemporary Issues in Crime and Justice No. 98). Retrieved from NSW Bureau of Crime Statistics and Research website: [http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/CJB98.pdf/\\$file/CJB98.pdf](http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/CJB98.pdf/$file/CJB98.pdf)