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Armed robbery in Australia: 2005 National Armed Robbery Monitoring Program annual report

Maria Borzycki

Research and Public Policy Series

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Director's introduction

The National Armed Robbery Monitoring Program (NARMP) was established to fill an information gap on trends in, and patterns of, armed robbery in Australia, especially in relation to changes over time in the use of specific weapons. The 2005 Annual Report is the third report since the Australian Institute of Criminology (AIC) began monitoring this offence in 2003. Building on previous analyses, this report provides an overview of the 7,210 victims of armed robbery and the situations, including the locations, that made them vulnerable to victimisation.

Included in this report is additional information on incidents of armed robbery. This allowed for a more detailed examination of the circumstances and characteristics of the 6,341 armed robbery incidents that were reported to police in Australian states and territories during 2005. Such information is valuable in assisting law enforcement as it provides a more complete picture of armed robbery. This includes being able to determine whether there are differences in net gains for offenders based on the type of weapon they use, the location they target, or whether the offence is committed by one or more offenders.

Equally important is being able to assess whether crime prevention initiatives are having the desired impact. An example is the recently introduced measure at some service stations of restricting after-hours access to a service window, preventing potential offenders from physically entering the premises. The NARMP will allow for the monitoring of any changes over time in the victimisation of service stations. It will also assist in identifying possible displacement effects produced as a result of target hardening one location vulnerable to armed robbery.

Many of the AIC's long-term monitoring programs, including the NARMP, are dependent on the support and cooperation of state and territory police. Despite the infancy of the NARMP, data are beginning to accumulate, which when mined provide further insight into some of the very different armed robbery scenarios, including armed robberies of residential premises (case study presented in this year's annual report), street armed robberies and armed robberies of licensed venues.

Toni Makkai
Director
Australian Institute of Criminology

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Abbreviations

ABS	Australian Bureau of Statistics
AIC	Australian Institute of Criminology
ASOC	Australian Standard Offence Classification
NARMP	National Armed Robbery Monitoring Program
RCV	Recorded crime: victims, Australia

Executive summary

National Armed Robbery Monitoring Program overview

Data collection for the National Armed Robbery Monitoring Program (NARMP) began in 2003, following a commitment from all police services in Australian states and territories to provide information that would permit the detailed, national-level exploration of armed robbery. The program was established to:

- monitor trends in armed robbery, specifically trends in weapon use
- identify changes in trends
- provide insight into the factors underpinning these trends.

This report presents the results of analyses of the third year of data collected on all armed robberies reported to police between 1 January and 31 December 2005. This report and future publications based on the NARMP will make use of additional information to that employed in the 2004 Annual Report (Borzycki 2006).

Victims of armed robbery

Analyses of the 2005 victim-based NARMP dataset suggest:

- since its establishment, the number of victims of armed robbery has fluctuated from year to year, with data suggestive of an eight percent increase in the number of victims compared with 2004
- knives made up more than half of the weapons involved in these victimisations, with a much smaller seven percent of armed robberies involving handguns
- just under half of all victims of armed robbery in 2005 were robbed in some form of retail location
- similar to 2004, in 2005 organisational victims accounted for 29 percent of victims recorded in the NARMP
- for non-organisational victims, the average age was 30 years with males being slightly younger on average (29 years) than females (33 years)
- males aged 18–19 years had the highest rates of armed robbery victimisation of all age and gender groupings (141.8 per 100,000 persons)
- fourteen percent of offenders were known to the victims.

Incidents of armed robbery

Additional data in the 2005 NARMP dataset allowed an examination of armed robbery incidents. Analyses suggest:

- during 2005, there were 6,341 incidents of armed robbery recorded in Australian states and territories
- just under one-third (30%) of all armed robbery incidents occurred on the street
- almost two-thirds (65%) of armed robbery incidents occurred between the hours of 6.00 pm and 6.00 am. Armed robberies were only slightly more likely (maximum 3% differential among all days) to occur on a weekend.
- for jurisdictions that were able to provide information on the type of property stolen, the most common type was cash followed by electrical goods (including mobile phones)
- on average, armed robbery offenders netted $1,232 per incident, although total values were skewed towards the lower end of the range
- 23 percent of armed robbery incidents had a net total value of nil, while 70 percent had a recorded total value of less than $500
- the highest average gains for offenders were from incidents where the most serious weapon used was a firearm ($3,374) and the lowest average was associated with syringe robberies ($353), patterns similar to those reported for 2004
- around nine in every 10 offenders in armed robbery incidents were male (where offender data were available), and 95 percent were aged under 40 years.

Patterns in armed robbery

These findings are indicative of broad trends in armed robbery, its victims and those who commit this crime. Despite some changes in the level of detail and the way some information is analysed, the 2005 NARMP findings are consistent with those observed in earlier years. This suggests that the features of Australian armed robberies have not changed markedly over the three years the NARMP has been collecting data, with armed robberies characterised as either:

- low-yield, unplanned and essentially opportunistic, especially in terms of weapons, as in the majority of street robberies
- high-gain, employing more difficult to obtain weapons, as seen in specific retail sites.

Data from the current and previous analyses also suggest that some residential armed robberies (home invasions) and a small subset of street robberies may fall into the latter category. Relative to other armed robberies, incidents in hotels/pubs tend to:

- involve firearms and more likely to have groups of offenders compared to other locations
- take place during the evening and early morning (between 6.00 pm and 6.00 am).

These factors combined suggest that this location type may be the target of more organised armed robbers who seek high gains and who intimidate their victims through offender numbers and hard to obtain and dangerous weapons such as handguns. It still remains unclear if pub robbery is a relatively new phenomenon, although the type of pub robberies analysed in the NARMP is becoming more standard now after three years of data collection. The ongoing accumulation of NARMP data will enable the continued monitoring of this type of armed robbery, assisting law enforcement and those responsible for security in pubs and other licensed venues to base crime reduction and prevention decisions on evidence.

Introduction

National Armed Robbery Monitoring Program collection

The NARMP aims to identify and monitor trends in armed robbery, with a particular focus on trends in weapon use, as well as providing insight into the factors that may underpin these trends. It reports on national-level analyses that complement other crime information sources. The NARMP was established under the auspices of Australasian police ministers and senior police officers (for more detail about the establishment of the NARMP, see the AIC NARMP website: http://www.aic.gov.au/research/projects/0003.html). The ongoing support of police services in all Australian states and territories ensures the NARMP continues.

The NARMP collection is still relatively new – it contains information concerning each victim of armed robbery reported to police in Australia since 2003. The information contained in the NARMP was initially modelled on the Recorded crime: victims, Australia (RCV) collection (for example, ABS 2007), although consultation with data providers and other key stakeholders has seen refinements to what is collected. For example, victim data relating to 2004 and subsequent years have been accompanied in the main by an incident identifier. This identifier allows victim records to be collapsed into the incidents in which those victims were involved. This is important because a victim-based collection can result in the multiple counting of certain elements of armed robbery when single incidents involve multiple victims. For instance, a single armed robbery involving a single handgun might have six victims. If data are analysed in a victim-based format, a count of six handguns would result but if the unit of analysis is the incident, only one handgun would be counted.

The level of detail in collated information about armed robberies has also increased over time. The initial annual dataset mostly contained information pre-coded into higher-level RCV categories. Files now received from jurisdictions contain information in its raw form, which allows more detailed categories to be analysed. The inclusion of more fine-grained categories means some analyses refer to categories containing only a few cases. It is important to be aware that small numbers can result in quite large fluctuations over time, affecting the reliability of comparisons across time. The types of variables collated have also changed over time so that additional information, such as the incident identifier, is now collected.

Due to the evolving nature of the NARMP, care should be taken in drawing strict or detailed comparisons among different recorded crime sources (such as the RCV and the NARMP), or even between the initial and later NARMP reports. Ongoing refinements to the nature of the material it contains mean that any comparisons drawn with earlier annual reports are observational only and are not accompanied by statistical tests of significance. The short time elapsed since the establishment of the NARMP also means that none of the annual comparisons has been subject to any time series analyses.

Report format

This report examines all armed robbery victims and the armed robberies they were involved in that were reported to police in all Australian jurisdictions from 1 January to 31 December 2005. Detail of the method and type of information included in the NARMP can be found in the technical appendix to this report, as can a more detailed discussion of the limitations of the NARMP. The technical appendix also details a glossary of terms and definitions relevant to this report.

The key findings from the 2005 NARMP collection are reported in three parts. The first part contains summaries of victim-based analyses. As these are in the same unit of analysis, broad comparisons have been drawn with information contained in earlier NARMP annual reports, as well as in other recorded crime sources, such as the RCV (ABS 2007, 2006a).

The second part examines characteristics of the armed robbery incident itself, using the incident as the unit of analysis. Findings also can be compared broadly with the 2004 NARMP analyses (all references throughout this report to 2004 NARMP findings relate to the Annual Report; see Borzycki 2006). However, data employed for this 2005 report are more truly national because all jurisdictions were able to supply a unique incident identifier. In 2004, not all jurisdictions could supply the incident identifier, which meant the incidents examined did not represent all incidents reported to police in Australia.

The third part reports on findings about armed robbery offenders also using incident-based analyses. The report concludes with a detailed case study examining armed robberies in residential premises. Robberies in this location are of interest because some characteristics suggest that they might be qualitatively different to robberies in other locations.

NARMP data suggest that the characteristics of armed robberies have been generally consistent over the three years of the program, although as noted earlier, caution should be exercised when making comparisons with previous years. Previous NARMP annual reports (for example, Borzycki, Sakurai & Mouzos 2004) have considered some findings within a routine activity framework, using this approach to account for why certain armed robbery characteristics tend to co-occur and why robberies are not equally likely across all times and locations. The framework states that for an offence to occur, a motivated offender, a likely target and the absence of a suitable guardian are necessary. Most of these same explanations are generally appropriate for the current analyses. To avoid unnecessary repetition, specific statements about the way current NARMP findings can be accounted for within this framework have not been included (in previous years, these were made with reference to individual analyses).

Key findings

Victims of armed robbery

The 2005 NARMP dataset contains records of 7,210 victims of armed robbery coming to police attention from 1 January to 31 December 2005. This was an eight percent increase on the number of victims in the 2004 dataset (n=6,646; see Borzycki 2006). The number of annual victimisations compiled for the NARMP has fluctuated in the three years since its establishment in 2003 (n=8,865 victims; see Borzycki, Sakurai & Mouzos 2004), but there has not been any discernible pattern to the change seen over that short time.

The number of armed robbery victims recorded in 2005 translates to a rate of victimisation of 35.4 persons per 100,000 (a slight increase from 33.1 in 2004). Both the number and rate of armed robbery victimisations are similar to those reported in RCV for 2005: 7,327 or 36.0 victims per 100,000 (revised; ABS 2007). The relative change in victim numbers over time has also generally mirrored that seen in RCV.

Around seven in 10 victims (n=5,102; 71%) were flagged as individual persons. The remainder were organisational victims, and the percentage breakdown of victim type was unchanged from 2004.

Weapons used against armed robbery victims

Not all jurisdictions were able to supply information about multiple weapons if more than one weapon had been used against a victim. Of the 6,201 victim records in which multiple weapon types were able to be listed, the average armed robbery in which they were involved had a single weapon. The median number of weapons used was also one, not surprising given that nine in 10 victims were involved in incidents where only single weapons were listed. Five percent were victims in incidents involving two weapons, and less than half of one percent of victims were threatened with three weapons.

Knives made up the majority of weapons used to commit armed robbery (55% of a total of 7,292 weapons listed for victims; see Table 1). Thirteen percent of listed weapons were generically classified as firearms, with seven percent of all weapons specified as handguns. Less than one percent of weapons used were replica firearms. Just over one-fifth were classified as other weapons (21%) and less than one in 20, a syringe (4%). The percentage breakdown is similar to that seen in the preceding year, although data suggest that firearms made up a slightly larger percentage of weapons in 2004 (15%), and knives a slightly smaller percentage (50%).

Table 1: Weapons used to threaten armed robbery victims, 2005[a]		
Weapon	**Number**	**Percent[b]**
Firearms		
Firearm (with no further detail)	212	3
Handgun	478	7
Shotgun	93	1
Rifle, airgun	46	1
Sawn-off longarm	19	< 1
Replica firearm	9	< 1
Other firearm (not classified elsewhere)	71	1
Total firearms	***928***	***13***
Knives		
Knife (with no further detail)	3,937	54
Kitchen knife	2	< 1
Scissors	1	< 1
Pocket knife	1	< 1
Screwdriver	18	< 1
Other knife (not classified elsewhere)	41	1
Total knives	***4,000***	***55***
Syringes		
Syringe	314	4
Total syringes	***314***	***4***
Other weapons		
Other weapon (with no further detail)	452	6
Club, baton or stick	234	3
Rock, brick or stone	48	1
Tool (not classified elsewhere)	143	2
Blunt instrument (not classified elsewhere)	12	< 1
Bottle, broken glass	191	3
Chemical spray	7	< 1
Explosive, bomb	1	< 1
Machete, axe	6	< 1
Sledgehammer	9	< 1
Crowbar, metal pipe	439	6
Bow, spear, speargun	1	< 1
Vehicle	3	< 1
Sword	1	< 1

Table 1: continued		
Weapon	**Number**	**Percent[b]**
Other weapon (not classified elsewhere)	9	< 1
Total other weapons	***1,556***	***21***
Weapon used (with no further detail)	367	5
Unknown	127	2
Total	***494***	***7***
Total	**7,292**	**100**

a: Multiple weapon types were listed for some victim records, therefore total number refers to the total number of weapon types listed, not the total number of victim records. Excludes individual and organisational victim records with all weapon variables coded as missing, not applicable or variable not supplied (n=283)

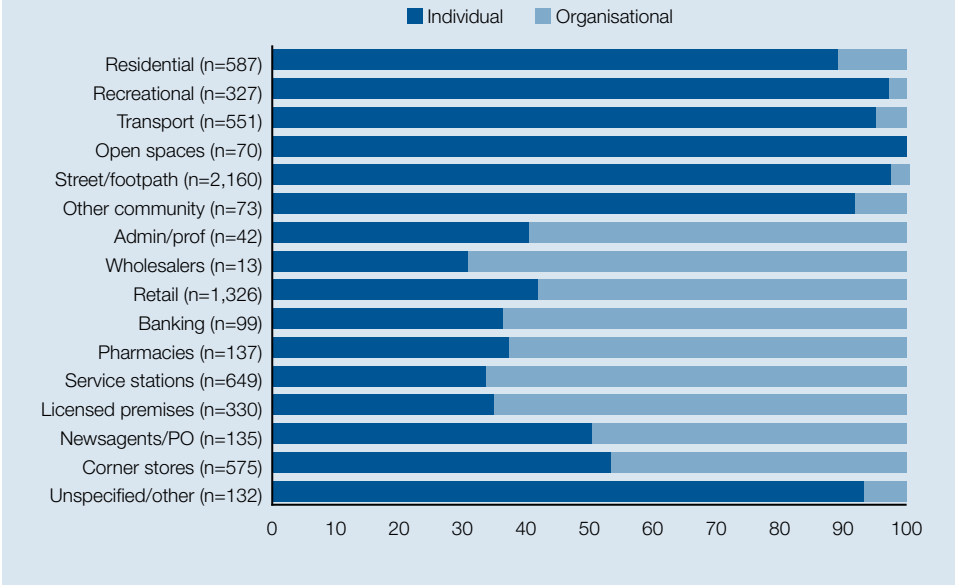
b: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]

Locations in which victims were robbed

Nearly half of all victims were robbed in some sort of retail setting (45%; totalling unspecified and specific listed retail locations). Over 40 percent of victims were robbed in an open public setting (43%; which includes recreational, transport-related, open spaces, and street and footpath), with the majority of these robbed on the street or footpath (30% of all victims). These figures are virtually unchanged from 2003 and 2004. The percentage of individual persons relative to organisational victims subject to robbery in each of the location categories was also similar to that observed in the previous year. Figure 1 highlights that around nine in 10 victims in locations classified as residential, recreational, transport-related, open spaces, street and footpath, and other community settings were individuals. Conversely, as would be expected, organisations made up the majority of victims in all primarily commercial settings. The exceptions to this were the categories of corner stores (which includes supermarkets and takeaways), and newsagencies/post offices. Both these settings presumably have high customer numbers, and some offenders may target these locations because they expect some takings from the organisation in question but may also take advantage of all possible targets, including customers.

Figure 1: Individual and organisational victims of armed robbery by location type, 2005 (percentage)[a]



a: Excludes individual and organisational victim records with missing location and/or organisational flag

Source: AIC NARMP 2005 [computer file]; n=7,206

Individual victims of armed robbery

The average armed robbery victim with valid age and gender information was 30 years old, although male victims were slightly younger (29 years) than female victims (33 years). As shown in Table 2, the majority of victims of either gender (60%) were aged less than 30 years. Consistent with 2004 findings, 64 percent of males were aged less than 30 years, and nearly half of all individual victims were males aged under 30 years (n=2,431).

Young men have previously shown to be subject to the high rates of armed robbery victimisation. Table 2 shows that men aged 18 to 19 experienced the highest rate of victimisation of all age and gender groupings (141.8 per 100,000 persons). The highest victimisation rate among women and girls was also found in this age group but the actual rate was substantially lower (40.9 per 100,000 persons), reflecting an overall gender difference (regardless of age): males at 37.7 versus females at 11.6. The ranking of victimisation rates from highest to lowest among males and females of different ages is broadly consistent with that observed in 2004. The slight increase in victim numbers has corresponded with a slight increase in rates for some, but not all, age–gender groups. For instance, the rates among males and females under the age of 15 are slightly lower, but those aged 18 and 19 years experienced a slightly higher rate than those seen in 2004.

Table 2: Age and gender of victims as a percentage of gender[a], and rate of victimisation[b] by age and gender, 2005

	Male		Female		Total		
Age group	**Percent**	**Rate**	**Percent**	**Rate**	**Percent**	**Rate**	**Number**
< 15 years	4	7.5	2	1.2	4	4.4	177
15 to 17 years	12	106.8	7	19.8	11	64.4	533
18 to 19 years	11	141.8	9	40.9	10	92.8	513
20 to 24 years	23	120.7	18	31.7	22	77.4	1,100
25 to 29 years	14	78.1	13	22.4	14	50.6	691
30 to 34 years	9	44.3	11	17.0	9	30.6	463
35 to 39 years	6	32.1	9	13.8	7	22.9	338
40 to 44 years	6	30.9	9	14.0	7	22.4	345
45 to 49 years	5	26.0	9	13.9	6	19.9	291
50 to 54 years	4	20.6	4	7.9	4	14.2	190
55 to 59 years	3	17.7	4	7.7	3	12.8	159
60 to 64 years	2	14.5	2	5.1	2	9.8	93
65 years and over	2	6.2	3	2.7	2	4.2	113
Total	**3,818**	**37.7**	**1,188**	**11.6**	**100**	**24.6**	**5,006**

a: Percentages do not necessarily total 100 because of rounding. Excludes individual victim records with missing age and/or gender

b: Rate of victimisation per 100,000 population (ABS 2006b), based on individual victims with valid age and gender. Excludes organisational victims, therefore lower than the rate specified when also considering organisational victims

Source: AIC NARMP 2005 [computer file]

Table 3: Locations where males and females of different ages were victimised as a percentage of age group for gender, 2005[a]

	Males				Females				
Location	**< 18**	**18–34**	**35–59**	**60 +**	**< 18**	**18–34**	**35–59**	**60+**	**Total number**
Residential	3	9	13	23	7	11	14	14	510
Recreational	14	6	5	4	7	5	1	2	315
Transport related	18	10	7	6	17	9	10	14	518
Open spaces (excluding street and footpath)	4	1	1	1	3	1	1	0	69
Street and footpath	49	49	34	23	39	37	21	27	2,080
Educational, health, religious, justice and other community	2	1	1	0	2	2	1	5	60
Administrative and professional	0	< 1	1	1	0	< 1	1	0	16
Wholesalers, warehouses, manufacturing and agricultural	< 1	< 1	< 1	0	0	0	0	0	3
Retail	6	6	13	15	17	20	22	21	542
Banking and financial	0	1	1	1	1	1	1	2	35
Pharmacies and chemists	0	< 1	1	4	0	2	3	0	50
Service stations	1	6	5	6	0	2	4	0	213
Licensed premises	< 1	2	3	4	0	2	3	5	111
Newsagents and post offices	0	1	3	4	0	< 1	5	2	68
Corner stores, supermarkets and takeaways	1	5	10	6	8	5	11	6	298
Unspecified and other	2	2	2	3	0	2	3	3	117
Total number	**607**	**2,157**	**910**	**143**	**103**	**609**	**413**	**63**	**5,005**

a: Percentages do not necessarily total 100 because of rounding. Excludes individual victim records with missing age and/or gender and/or location

Source: AIC NARMP 2005 [computer file]

With the exception of females aged 35 to 59 years, the largest percentage of victims in each age and gender group was robbed on the street or footpath (Table 3). Data suggest that compared with all other age–gender groupings, a slightly higher percentage of males over

60 were robbed in residential locations. Around one-fifth of females in all age groups were robbed in an unspecified retail setting, whereas only around one in 20 males aged less than 34 years were victimised in this location.

As with most current findings, general patterns are similar to those seen in 2004, although almost one in five males and females younger than 18 years were victimised in transport-related settings. This is a slight increase in the percentages shown for the 2004 dataset, especially for males. Fluctuations since 2003 in the percentages of victims subject to armed robbery in most other locations, and in older age groups, are likely to be the result of the small number of victims in these sub-categories.

Table 4: Weapons[a] used against male and female victims of different ages as a percentage of age group for gender, 2005[b]

	Males					Females				
Age group	Firearm	Knife	Syringe	Other weapon	Total number	Firearm	Knife	Syringe	Other weapon	Total number
< 15 years	6	63	1	31	144	10	67	5	19	21
15 to 17 years	6	63	2	29	410	17	55	11	17	65
18 to 19 years	10	62	3	25	360	13	66	4	17	101
20 to 24 years	11	63	2	24	803	15	59	9	17	192
25 to 29 years	8	61	4	27	508	10	61	11	18	133
30 to 34 years	11	59	6	25	302	16	51	10	23	115
35 to 39 years	14	52	4	29	212	18	51	11	20	92
40 to 44 years	11	64	2	22	211	17	65	2	16	100
45 to 49 years	15	62	3	20	167	14	66	4	16	93
50 to 54 years	20	54	4	22	127	17	65	7	11	46
55 to 59 years	18	56	3	24	102	7	69	2	21	42
60 to 64 years	20	49	0	31	61	14	52	5	29	21
65 years and over	7	60	3	29	68	3	68	3	26	34
Total (percent)	**11**	**61**	**3**	**25**	**100**	**14**	**60**	**7**	**18**	**100**

a: Based on most serious weapon listed in derived weapon combination, assuming order of seriousness of firearm, knife, syringe and other weapon. Analysis of the 2004 dataset was not identical because weapon was based on first listed weapon, which was not necessarily the most serious if multiple weapons were listed

b: Percentages do not necessarily total 100 because of rounding. Excludes individual victim records with unspecified weapon type, or weapon types of unknown, not applicable or not stated, and/or missing age and/or gender

Source: AIC NARMP 2005 [computer file]; n=4,530

The most serious weapons used against male and female armed robbery victims of different ages are summarised in Table 4. As shown, knives were used against at least half of victims regardless of age or gender, although some age and gender differences in patterns of weapon use were found. For instance, a slightly higher percentage of females compared with males were subject to robbery with a syringe and firearm. These findings correspond to those obtained in 2004. Of note, men aged 45 years and older were subject to larger proportions of firearm robberies relative to armed robberies with other weapon types, than younger males. Some age groups for women and girls showed similar percentages of firearm use (that is, greater than 15%). As has been noted in earlier reports however, this might reflect the types of locations where women are more likely to be employed, such as certain retailers, which may involve a higher risk of the robbery being committed with a firearm.

Table 5: Weapons[a] used against individual victims with supplied injury information in two jurisdictions as a percentage of weapon type, 2005[b]

	Weapon				Total
Injury	Firearm	Knife	Syringe	Other	(percent)
No injury	39	37	34	35	36
Minor injury	15	22	26	39	25
Serious injury[c]	8	4	2	14	6
Death	1	0	0	0	< 1
Emotional trauma	38	37	38	12	32
Total number	**142**	**434**	**53**	**161**	**790**

a: Based on most serious weapon listed in derived weapon combination, assuming order of seriousness of firearm, knife, syringe and other weapon. Analysis of the 2004 dataset was not identical because weapon was based on first listed weapon, which was not necessarily the most serious if multiple weapons were listed

b: Percentages do not necessarily total 100 because of rounding. Excludes individual victim records with missing injury information and/or unspecified weapon type, or weapon types of unknown, not applicable or not stated

c: Serious injury refers to that requiring immediate emergency medical treatment

Source: AIC NARMP 2005 [computer file]

Only a minority of jurisdictions were able to supply information regarding victim injury in armed robbery, resulting in injury data for only around 10 percent of victims (n=790). The very small number of cases should not be over-interpreted as somehow representative of all armed robbery victims. Nonetheless data are broadly consistent with 2004 NARMP findings insofar as only a very small proportion of these supplied victim cases recorded serious injury (6%; see Table 5). Over one-third of victims had no report of injury, and this was true regardless of the most serious weapon used in the robbery. One-quarter of victims received a minor injury (25%), and of the major weapon types, other weapon robberies resulted in the highest percentage of reported minor injuries (consistent with 2004). There was a single death, the first recorded in the NARMP, arising from a firearm robbery.

Organisational victims of armed robbery

Organisations made up 29 percent of all victims recorded in the NARMP, as was found in 2004. Similar to person victims of armed robbery, the majority of organisations were robbed with knives (61% for both types of victim), although a higher percentage were subject to firearm robbery (20% versus 11% for individuals). Accordingly, a lesser percentage of organisations were robbed with other weapons: 14 percent, as compared with 24 percent of all individuals, regardless of age or gender.

Weapons used and the locations where organisations were robbed in 2005 were similar to those seen in 2004. For instance, Table 6 shows that unspecified retailers and licensed premises again made up the majority of organisations robbed with firearms (31% and 21%, respectively for 2005; 31% and 22% in 2004). Although banking and financial settings were the site of around three percent of all organisational robberies, 10 percent of all organisational firearm robberies occurred at this location (in 2004, almost 4% of all robberies occurred in this location, but 8% all of those with firearms). In both years, 44 percent of syringe robberies of organisations took place in an unspecified retail setting.

Table 6: Organisational victims of armed robbery by weapon type[a] and location as a percentage of weapon type, 2005[b]

Location	Weapon				Total number
	Firearm	Knife	Syringe	Other	
Residential	4	2	2	6	62
Recreational	1	1	0	0	9
Transport related	2	1	0	2	26
Open spaces (excluding street and footpath)	0	0	0	0	0
Street and footpath	2	3	0	4	53
Educational, health, religious, justice and other community	0	1	0	0	6
Administrative and professional	1	1	3	2	18
Wholesalers, warehouses, manufacturing and agricultural	1	< 1	0	0	7
Retail	31	38	44	32	683
Banking and financial	10	1	1	3	55
Pharmacies and chemists	2	5	5	2	74
Service stations	14	21	24	27	387
Licensed premises	21	7	4	11	195
Newsagents and post offices	4	4	1	2	61
Corner stores, supermarkets and takeaways	8	15	17	8	237
Unspecified and other	< 1	1	0	0	9
(Total number)	**368**	**1,149**	**103**	**262**	**1,882**

a: Based on most serious weapon listed in derived weapon combination, assuming order of seriousness of firearm, knife, syringe and other weapon. Analysis of the 2004 dataset was not identical because weapon was based on first listed weapon which, was not necessarily the most serious of multiple weapons were listed

b: Percentages do not necessarily total 100 because of rounding. Excludes organisational victim records with missing location and/or unspecified weapon type, or weapon types of unknown, not applicable or not stated.

Source: AIC NARMP 2005 [computer file]

Offenders involved in the armed robbery of individual and organisational victims

The NARMP contains information about both alleged and convicted offenders linked to armed robberies reported in 2005. It does not contain demographic information about individuals suspected of robbery or reported offender descriptions where individuals had

not been apprehended by the time data were extracted. There is the capacity to capture information for up to five offenders involved in an armed robbery, although not all jurisdictions could supply this and if more than five offenders were involved, information about sixth and subsequent armed robbers has not been collated. Finally, there is redundancy in victim-based offender information because armed robberies involving multiple victims have duplicated offender data for each involved victim. Because of these dataset features, the following describes a subset of all offenders involved in reported armed robberies in Australia in 2005, with some information repeated in that subset.

Of the 2,268 victims with offender information supplied, demographic details were available for 3,470 offenders. This means 69 percent of victim records did not contain associated offender data. Table 7 shows that almost one in three organisational victims had one linked offender, compared with 17 percent of individuals robbed. On average, individuals were victimised by marginally larger offender groups (1.6 offenders) than organisations (1.4). Previous NARMP findings suggest the same but as noted in earlier reports, these apparent differences simply may be an artefact of offender data limitations.

Table 7: Offenders involved in the armed robbery of individual and organisational victims as a percentage of victim type, 2005[a]

	Victim type		
Offender count	**Individuals**	**Organisations**	**Total number**
Nil/unsolved[b]	73	59	4,940
One	17	30	1,516
Two	6	8	472
Three	2	2	155
Four	1	1	80
Five[c]	1	< 1	45
Total number	**5,102**	**2,106**	**7,208**

a: Percentages do not necessarily total 100 because of rounding

b: Includes individual and organisational victim records that were unsolved, with an outcome of no offender proceeded against, or where offender information could not be supplied or was missing

c: Dataset contains a maximum of five offenders therefore victimisations involving more than five offenders are included in the count of five

Source: AIC NARMP 2005 [computer file]

Where relationship information was available, the offender was known to only about one in eight victims. For nearly 90 percent of individual victims, offenders were unknown, that is, there was no prior relationship or association between the victim and offender (see Table 8). This supports the commonly held belief that robbery tends to be an anonymous crime. The percentage of unknown offenders was substantially increased compared with 2004 analyses (59%), but this is because only a minority of jurisdictions have been able to supply relationship data, and the form of this information has not been consistent over time.

Table 8: Relationships between individual victims and offenders, 2005		
Relationship	**Number**	**Percent[a]**
Offender(s) known to victim	206	14
Offender(s) unknown to victim	1,296	86
No offender identified, relationship unknown	1	< 1
Total[b]	**1,503**	**100**

a: Multiple relationships were listed for some victim records in which multiple offenders were identified, therefore number refers to the total number of relationships listed not the number of individual victim records. Excludes victim records with relationship codes of missing, not applicable or variable not supplied, and records flagged as organisational victims.

b: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]

Less than one-quarter of victim records were noted as not being finalised at the time of data extraction, regardless of the victim type (overall percentage, 23%). Table 9 shows that for nearly half of individual victims with valid data (49%), the matter was finalised without an offender being proceeded against. The equivalent percentage for organisational victims was 39 percent (overall percentage for all victims, 46%). The summary statistics should be considered with the caveat that the investigative status variable is problematic for a range of reasons. These findings should not be compared with earlier NARMP annual reports (see technical appendix), nor with RCV information, which only reports on the status at 30 days following report.

Table 9: Status of investigation by victim type, 2005 (percent)[a]		
Status	**Individuals**	**Organisations**
Investigation not finalised	24	22
Investigation finalised, no offender proceeded against	49	39
Investigation finalised, offender proceeded against	27	39
Other outcome	< 1	0
Total number[b]	**4,573**	**1,930**

a: Refers to outcome at data extraction or at 180 days for jurisdictions unable to supply outcome at data extraction, therefore time elapsed between incident and outcome is not equivalent for all victim records

b: Percentages do not necessarily total 100 because of rounding. Excludes individual and organisational victim records with status of investigation missing or not supplied.

Source: AIC NARMP 2005 [computer file]; n=6,503

Repeat victimisation

A small number of victims (as identified by victim reference numbers) appeared in the 2005 dataset on multiple occasions. Although not a completely valid indicator of repeat victimisation (see the discussion on data limitations in the technical appendix), there were 101 victims records where details strongly suggest repeat victimisation during 2005. Fourteen of these victims (individuals and organisations) were subject to armed robbery on at least three occasions, and three on at least four occasions. There was an average of 64 days between the dates on which the first and second armed robberies occurred, although 310 days elapsed for one victim. For 63 percent of repeat victims, the same weapon was used in the first and second reported robberies.

The majority of victims were organisations (n=73; 72%), and of these organisations, 26 percent were unspecified retailers, 22 percent were service stations, and a further 16 percent were licensed premises. Forty-six organisations with valid weapon data were robbed with a knife on the first occasion, and for 34 of these, knives were also used in the second victimisation. Forty-one percent of repeat organisational victims were robbed by a single offender in the first episode of victimisation.

Reporting by armed robbery victims

The majority of armed robbery victims (87%) reported the event to police on the same day as its occurrence. Among victims who reported some time after the occurrence date (n=913), the average delay was one week. Ninety-six percent of victims who were flagged as organisations reported on the same day, compared with 84 percent of individual persons. Of those individual victims who did not report on the same day, the majority (60%) were aged from 18 to 34 years, and the average length of the delay was eight days. For organisational victims, the average delay was two days.

Armed robbery incidents

A total of 6,341 unique armed robbery incidents were identified and created from the victim file. Unlike the 2004 Annual Report, the incident file contained information from all Australian jurisdictions (in 2004, not all states could provide an incident identifier that allowed victim records to be linked). Nonetheless, many of the results over both years were consistent. For instance, Table 10 shows that six in 10 robberies involved only a single person victim, and three in 10 a single organisation (2004 figures were 59% and 32%, respectively). A larger number, also translating to a larger percentage of incidents, involved both an organisation and an individual person in 2005 (n=184) compared with 2004 (n=21). This may be linked to an actual increase in these types of incidents or may simply reflect the more comprehensive and national nature of the 2005 file.

Table 10: Types of victims involved in armed robbery incidents, 2005[a]		
Victim type	**Number**	**Percent**
One individual	3,783	60
One organisation	1,877	30
Multiple individuals	466	7
Multiple organisations	12	< 1
One organisation and one individual	184	3
One organisation and multiple individuals	17	< 1
Total	**6,339**	**100**

a: Percentages do not necessarily total 100 because of rounding. Excludes incident records with missing victim type

Source: AIC NARMP 2005 [computer file]

Locations where armed robberies occurred

Because the vast majority of incidents involved only single victims (90%), findings are consistent with those observed in victim-based analyses: 30 percent of all armed robberies took place in the street and 19 percent occurred in unspecified retailers (see Figure 1). Similar percentages were found in the previous annual report (30% and 17%, respectively). As was the case with the victim-based analyses, robberies involving only individuals tended to take place in open public spaces, whereas most organisational victims (whether or not robbed in conjunction with individual persons) were robbed in commercial settings. For instance, armed robberies involving individuals often occurred in the street (45% of lone individuals; 37% of multiple person robberies), whereas this was rarely the case for robberies involving organisational victims (see Table 11). The converse was true for most retail locations. For instance, over 30 percent of incidents involving organisations took place in unspecified retailers, but only around one in 10 involving only individuals occurred in this location. Unspecified retail locations were the most common site for incidents involving both an organisational and individual victim (33%).

Table 11: Locations in which different victim types were robbed as a percentage of victim type, 2005[a]

Location	Victim type						Total number
	Single individual	Single organisation	> One individual	> One organisation	One organisation + one individual	One organisation + > one individual	
Residential	10	3	13	0	3	0	490
Recreational	6	< 1	7	0	0	6	272
Transport related	11	1	10	8	1	0	481
Open spaces (excluding street and footpath)	1	0	2	0	0	0	57
Street and footpath	45	2	37	0	7	12	1,922
Educational, health, religious, justice and other community	1	< 1	2	0	0	0	66
Administrative and professional	< 1	1	< 1	0	2	0	38
Wholesalers, warehouses, manufacturing and agricultural	< 1	< 1	< 1	0	0	0	12
Retail	10	37	9	33	33	41	1,186
Banking and financial	1	3	< 1	8	1	6	93
Pharmacies and chemists	1	4	2	8	4	0	117
Service stations	4	21	3	17	17	6	598
Licensed premises	2	10	3	17	9	12	286
Newsagents and post offices	1	3	2	0	8	6	104
Corner stores, supermarkets and takeaways	5	12	7	8	16	12	498
Unspecified and other	3	< 1	2	0	1	0	118

a: Percentages do not necessarily total 100 because of rounding. Excludes incident records with missing victim type and/or location.

Source: AIC NARMP 2005 [computer file]; n=6,338

Temporal aspects of armed robbery

Four in 10 armed robberies (42%) occurred after 6.00 pm but before midnight, and almost two-thirds (65%) took place in the hours between 6.00 pm and 6.00 am. Findings are broadly consistent with earlier NARMP data, as well as international research. For example:

- sixty percent of 2004 NARMP incidents occurred between 6.00 pm and 6.00 am
- fifty-one percent of a sample of armed and unarmed robberies of individual victims in England and Wales in 2001–02 occurred between 6.00 pm and 2.00 am (Smith 2003).

Table 12 summarises incident times and locations, and shows some settings that were disproportionately subject to armed robberies at certain times. Not surprisingly, locations that tend to keep standard business hours (9.00 am to 6.00 pm), such as banking and financial settings (76%), pharmacies and chemists (64%), and administrative and professional offices (71%), had a majority of armed robberies during business hours. However, only 35 percent of armed robberies in all locations occurred during business hours. In contrast, 85 percent of armed robberies in service stations and three-quarters (75%) of those in licensed premises took place between 6.00 pm and 6.00 am. These patterns are similar to those seen in the 2004 analyses.

Table 12: Time of the day when robberies occurred in various locations as a percentage of location, 2005[a]

	Time category							
Location	**Midnight to 2.59 am**	**3.00 am to 5.59 am**	**6.00 am to 8.59 am**	**9.00 am to 11.59 am**	**Noon to 2.59 pm**	**3.00 pm to 5.59 pm**	**6.00 pm to 8.59 pm**	**9.00 pm to 11.59 pm**
Residential	14	10	4	9	8	10	21	24
Recreational	15	5	3	8	8	13	19	28
Transport related	15	5	6	10	10	14	17	23
Open spaces (excluding street and footpath)	14	7	4	11	7	18	23	18
Street and footpath	21	7	4	5	8	9	19	27
Educational, health, religious, justice and other community	8	6	12	17	18	12	8	20
Administrative and professional	8	3	8	21	26	24	5	5
Wholesalers, warehouses, manufacturing and agricultural	8	17	8	25	0	17	0	25
Retail	4	5	6	9	15	19	23	20
Banking and financial	4	3	9	22	25	30	4	3
Pharmacies and chemists	0	2	5	15	20	30	23	6
Service stations	27	21	6	2	2	5	17	21
Licensed premises	15	7	5	6	7	9	24	27
Newsagents and post offices	1	21	22	12	17	23	4	0
Corner stores, supermarkets and takeaways	12	8	6	6	10	12	23	23
Unspecified and other	19	5	6	7	13	18	14	18
Total number	**932**	**515**	**332**	**469**	**624**	**804**	**1,231**	**1,433**

a: Percentages do not necessarily total 100 because of rounding. Excludes incident records with missing location.

Source: AIC NARMP 2005 [computer file]; n=6,340

Slightly higher percentages of armed robberies were reported as occurring around the weekend (Monday and Friday 15% each, Saturday and Sunday 16% each) as compared with mid-week (Tuesday to Thursday 13% each). Date and time data in combination (see Table 13) show that armed robberies were more frequent at certain days and times during the week: four in 10 robberies occurred between the hours of 6.00 pm and 6.00 am on Fridays, Saturdays, Sundays and Mondays.

Table 13: Day of the week and time of the day of armed robberies as a percentage of day of the week, 2005[a]

Time category	Day of the week						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Midnight to 2.59 am	21	10	12	12	13	14	19
3.00 am to 5.59 am	11	8	6	7	8	7	9
6.00 am to 8.59 am	6	7	5	5	5	3	5
9.00 am to 11.59 am	6	8	8	7	7	9	6
Noon to 2.59 pm	7	10	11	11	10	11	10
3.00 pm to 5.59 pm	12	14	12	14	12	14	11
6.00 pm to 8.59 pm	17	21	22	20	21	18	17
9.00 pm to 11.59 pm	21	21	23	23	23	24	23
Total number	**994**	**920**	**822**	**819**	**847**	**953**	**986**

a: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]; n=6,341

Weapons used in armed robbery

Given the high proportion of single victim incidents, patterns of weapon use to emerge from the incident-based analysis closely mirror those reported using victim-based files. Most incidents involved a knife (55%; Table 14). Around one in 20 (4%) involved a syringe, and less than one in five a firearm (12%) or other weapon (19%). Unchanged from 2004, most firearm incidents involved threats with a single firearm (10% of all incidents; 13% previously) and most knife robberies, a single knife (53% of incidents; 52% in 2004). The most commonly described combination of weapons was a knife and some other weapon (n=89). However, the NARMP does not necessarily collate information on all of the weapons used in an armed robbery, therefore weapon combination findings are not entirely descriptive of all armed robberies.

Table 14: Weapon combinations[a] used against different victim types as a percentage of victim type, 2005[b]

Weapon combinations	Victim type						Total	
	Single individual	Single organisation	> One individual	> One organisation	One organisation + one individual	One organisation + > one individual	Number	Percent
Firearms								
Single firearm	7	15	12	8	13	6	633	10
Multiple firearms	< 1	1	1	0	1	0	18	< 1
Firearm, knife	< 1	1	1	0	1	0	41	1
Firearm, syringe	< 1	< 1	0	0	0	0	2	< 1
Firearm, other weapon	1	1	1	8	1	0	41	1
Firearm, unspecified weapon	< 1	< 1	< 1	0	0	0	20	< 1
Firearm, knife, other weapon	0	< 1	0	0	0	0	2	< 1
Total firearm combinations (n)	**321**	**335**	**71**	**2**	**27**	**1**	**757**	**12**
Knives								
Single knife	54	52	50	50	59	35	3,365	53
Multiple knives	< 1	< 1	0	0	0	0	7	< 1
Knife, syringe	< 1	< 1	< 1	0	0	6	11	< 1
Knife, other weapon	1	1	2	0	2	6	89	1
Knife, unspecified weapon	< 1	< 1	< 1	0	1	0	14	< 1
Knife, other weapon, unspecified weapon	0	< 1	0	0	0	6	2	< 1
Total knife combinations (n)	**2,101**	**1,012**	**246**	**6**	**114**	**9**	**3,488**	**55**
Syringes								
Single syringe	4	5	2	0	2	6	275	4
Syringe, other weapon	< 1	< 1	0	0	0	0	3	< 1
Total syringe combinations (n)	**164**	**98**	**11**	**0**	**4**	**1**	**278**	**4**

Table 14: continued

Weapon combinations	Victim type						Total	
	Single individual	Single organisation	> One individual	> One organisation	One organisation + one individual	One organisation + > one individual	Number	Percent
Other weapons								
Single other weapon	21	12	21	0	14	29	1,164	18
Multiple other weapons	< 1	< 1	< 1	0	0	0	22	< 1
Other weapon, unspecified weapon	0	< 1	0	0	0	0	1	< 1
Total other weapon combinations (n)	**827**	**232**	**97**	**0**	**26**	**5**	**1,187**	**19**
No specific weapon types/missing	10	11	9	33	7	6	629	10
Total unspecified/ missing (n)	**370**	**200**	**41**	**4**	**13**	**1**	**629**	**10**
Total number	**3,783**	**1,877**	**466**	**12**	**184**	**17**	**6,339**	

a: Weapon combinations derived from the up to three listed weapon types. Excludes incident records with missing victim type.

b: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]

Table 15 describes the most serious weapon used in armed robberies in different locations. As was the case with 2004 armed robberies, firearms were used in a higher percentage of robberies in banking and financial settings (44%; 41% in 2004) and in licensed premises (35%; 44% previously), relative to other locations. Almost six in 10 street robberies (58%) were carried out with a knife.

Table 15: Most serious weapon[a] used in various locations as a percentage of location, 2005[b]

Location	Weapon					
	Firearm	Knife	Syringe	Other	Non-specific or missing	Total number
Residential	18	46	2	22	11	490
Recreational	7	53	4	29	8	272
Transport-related	9	60	5	17	10	481
Open spaces (excluding street and footpath)	11	49	4	32	5	57
Street and footpath	5	58	4	25	8	1,922
Educational, health, religious, justice and other community	9	47	2	30	12	66
Administrative and professional	11	42	8	18	21	38
Wholesalers, warehouses, manufacturing and agricultural	33	42	0	0	25	12
Retail	15	55	6	12	12	1,188
Banking and financial	44	30	2	12	12	93
Pharmacies and chemists	9	64	5	8	15	117
Service stations	12	56	5	16	11	598
Licensed premises	35	41	1	16	7	286
Newsagents and post offices	21	60	2	9	9	104
Corner stores, supermarkets and takeaways	12	61	6	8	12	498
Unspecified and other	8	48	7	25	11	118
Total (percent)	**12**	**55**	**4**	**19**	**10**	

a: Based on most serious weapon listed in derived weapon combination, assuming order of seriousness of firearm, knife, syringe and other weapon

b: Percentages do not necessarily total 100 because of rounding. Excludes incident records with missing location.

Source: AIC NARMP 2005 [computer file]; n=6,340

Property taken in armed robbery incidents

Some jurisdictions, although not all, were able to supply information concerning the nature of up to five types of property stolen in an incident (n=3,298). As there are issues surrounding the reliability and representativeness of property data, the results should be interpreted with caution. Most incidents (n=2,013; 61%) involved the theft of only a single item, although on average nearly two (1.7) different property types were stolen in those incidents with supplied property information.

The most commonly reported stolen property item was cash, listed 2,077 times throughout the incident dataset, appearing as stolen in six in every 10 incidents with property information. The least often listed stolen item was weaponry, appearing only 28 times. Electrical equipment, which includes mobile phones, was listed 1,300 times in 1,038 incidents. Research from England and Wales confirms these findings, with cash being the most often stolen item in personal robbery, and mobile phones stolen or demanded in 43 percent of incidents (Smith 2003). There were 402 armed robberies in the current dataset in which both electrical equipment and cash were stolen. Fifty-seven percent of these occurred in the street or footpath, with persons (either alone or in groups) the victims in 89 percent of incidents.

Given the many possible different property combinations that could arise from an armed robbery, information has been collapsed into hierarchical categories. The first category captures all incidents in which cash was stolen, regardless of what other property may have been taken. The second captures armed robberies in which negotiable documents but not cash (and potentially, other items) were taken. The third includes incidents where identity documents either with or without other property, but not cash or negotiable documents, were stolen and so on.

Table 16 shows that cash was the item stolen in 57 percent of robberies where only one type of property was taken. If more than one type of property was taken, there was a high likelihood that one of those property items would be cash (for example, cash was taken in 89% of incidents with five property types). The percentage of incidents with stolen cash varied depending on location. For example, around half of the armed robberies in residences, recreational locations, transport-related settings, and in the street involved the theft of cash, compared with over 80 percent in service stations, newsagents, banking and financial settings, and corner stores (see Table 17). The 2004 Annual Report noted similar findings and remarked that these latter locations tend to be the site for high cash turnover businesses, making it unsurprising that cash was often stolen. The percentage of incidents in pharmacies resulting in the theft of alcohol and other drugs also tended to be higher than in other locations, and this was also found in 2005 (26%).

Table 16: Type and count of property taken in armed robbery incidents[a] as a percentage of count, 2005[b]

Property type	Count of stolen property types					Total (percent)
	1	2	3	4	5	
Cash	57	66	64	81	89	60
Negotiable documents	1	6	12	11	9	4
Identity documents	1	9	9	6	0	4
Luggage	6	8	11	2	2	6
Electrical equipment	18	8	4	0	0	13
Jewellery	2	1	1	0	0	2
Alcohol and other drugs	4	1	1	0	0	3
Weapons	< 1	0	0	0	0	< 1
Personal items not classified elsewhere	1	1	0	0	0	1
Conveyances and accessories	2	< 1	0	0	0	2
Other property not classified elsewhere	5	0	0	0	0	3
No property stolen	0	0	0	0	0	2
Total number[c]	**2,013**	**584**	**331**	**238**	**65**	**3,298**

a: Derived from first listed victim for incident because property information is usually not linked to individual victims but to the incident itself. Property type categories are hierarchical: the first category captures all property combinations in which cash was listed, the second captures all combinations including negotiable documents but excluding cash and so on. Electrical equipment includes mobile phones and accessories. Property count describes the number of different types of property listed in an incident record, excluding duplicated property types.

b: Percentages do not necessarily total 100 because of rounding

c: Total number includes incident records annotated as no property stolen but excludes incident records with property information missing or not supplied

Source: AIC NARMP 2005 [computer file]

Table 17: Types of property taken[a] in various locations as a percentage of location, 2005[b]

Location	Property type											Total number
	Cash	Negotiable documents	Identity documents	Luggage	Electrical equipment	Jewellery	Alcohol and other drugs	Weapons	Personal items NCE[c]	Conveyances	Other NCE	
Residential	49	5	4	9	19	4	4	1	1	2	3	251
Recreational	52	2	5	9	25	2	1	0	1	4	0	161
Transport related	49	5	7	9	23	1	0	1	< 1	3	1	269
Open spaces (excluding street and footpath)	45	0	0	13	26	3	3	0	0	11	0	38
Street and footpath	51	7	6	11	18	2	1	< 1	2	2	1	1,119
Educational, health, religious, justice and other community	36	0	7	7	25	4	4	0	4	7	7	28
Administrative and professional	47	6	0	12	18	0	12	6	0	0	0	17
Wholesalers, warehouses, manufacturing and agricultural	67	0	0	0	0	0	0	0	0	0	33	3
Retail	75	1	1	1	4	2	4	0	1	1	9	586
Banking and financial	90	0	0	0	3	0	0	3	3	0	3	39
Pharmacies and chemists	59	4	2	0	7	0	26	0	0	0	2	54
Service stations	85	2	0	1	2	0	6	0	0	0	5	287
Licensed premises	69	6	3	3	7	0	9	1	0	0	2	116
Newsagents and post offices	88	2	0	0	2	0	5	0	0	0	2	41
Corner stores, supermarkets and takeaways	86	1	1	1	5	0	4	0	0	1	2	170
Unspecified and other	56	6	8	12	15	4	0	0	0	0	0	52
Total number[d]	**1,989**	**132**	**127**	**212**	**432**	**51**	**95**	**9**	**33**	**51**	**100**	**3,231**

a: Derived from first listed victim for incident because in the majority of victim records, property information is not linked to individual victims but to the incident itself. Property type categories are hierarchical: the first category captures all property combinations in which cash was listed, the second captures all combinations including negotiable documents but excluding cash and so on. Electrical equipment includes mobile phones and accessories.

b: Percentages do not necessarily total 100 because of rounding

c: NCE = not classified elsewhere

d: Total number excludes incident records annotated as no property stolen, or with property and/or location missing or not supplied

Source: AIC NARMP 2005 [computer file]

For a subset of incidents, information was included on the value of stolen items (n=2,830), although this variable should be treated as only generally suggestive of the nature of the financial loss associated with armed robbery (in Australian jurisdictions, property value is not usually a mandatory reporting field, it is often only an estimate and it is not typically validated at a later date).

On average and regardless of the weapon used, armed robbery offenders netted $1,232 per incident, although total values were skewed towards the lower end of the range:

- the median value was $200
- twenty-three percent of incidents had a total recorded value of nil
- seventy percent of incidents had a recorded total value of less than $500.

The highest average gains for offenders were from incidents where the most serious weapon used was a firearm ($3,374; see Table 18). The lowest average was associated with syringe robberies ($353), with similar findings in the 2004 analyses. Other consistent findings are:

- the highest average value gains (calculated from weapon–location categories containing more than one incident record) were from firearm robberies in banking and financial settings ($10,570) and licensed premises ($9,052)
- irrespective of weapon use, the highest average gains (again in categories with more than one record) were from financial settings ($7,273) and licensed premises ($6,092).

Table 18: Average total dollar value of property stolen in armed robberies using various weapons, 2005[a]

Location	Weapon				
	Firearm $	Knife $	Syringe $	Other $	Total $
Recreational (n)	2,458 (9)	645 (62)	298 (4)	480 (40)	718 (115)
Transport related (n)	6,774 (25)	739 (118)	485 (9)	518 (46)	1,438 (198)
Open spaces (excluding street and footpath) (n)	2,050 (2)	853 (9)	1,800 (1)	279 (8)	791 (20)
Street and footpath (n)	815 (31)	762 (372)	432 (33)	378 (189)	631 (625)
Educational, health, religious, justice and other community (n)	410 (3)	1,254 (9)	– (0)	440 (5)	866 (17)
Administrative and professional (n)	9,000 (1)	333 (9)	458 (1)	265 (4)	901 (15)
Wholesalers, warehouses, manufacturing and agricultural (n)	75,000 (1)	– (0)	– (0)	– (0)	75,000 (1)
Retail (n)	1,704 (115)	793 (324)	305 (39)	3,302 (85)	1,324 (563)
Banking and financial (n)	10,570 (20)	1,387 (10)	– (0)	200 (1)	7,273 (31)
Pharmacies and chemists (n)	878 (5)	729 (29)	179 (4)	1,005 (1)	699 (39)
Service stations (n)	634 (41)	630 (144)	235 (18)	456 (46)	570 (249)
Licensed premises (n)	9,052 (20)	4,660 (33)	1,100 (1)	5,594 (14)	6,092 (68)
Newsagents and post offices (n)	1,723 (5)	2,788 (6)	– (0)	– (0)	2,304 (11)
Corner stores, supermarkets and takeaways (n)	1,281 (29)	510 (101)	408 (12)	272 (12)	629 (154)
Unspecified and other (n)	246 (5)	668 (20)	125 (4)	2,548 (14)	1,180 (43)
Total average dollars (n)	**3,374 (364)**	**838 (1,348)**	**353 (133)**	**1,164 (513)**	**1,273 (2,358)**

a: Based on most serious weapon listed in derived weapon combination, assuming order of seriousness of firearm, knife, syringe and other weapon. Excludes incidents where total property values and/or location were missing or not supplied and/or weapon was missing or unspecified.

Source: AIC NARMP 2005 [computer file]

Armed robbery offenders

Offender data were available for 1,990 incidents, although as noted in the technical appendix, NARMP offender data are only very broadly indicative of all armed robbery offenders. Due to the possibility of multiple offenders being associated with a single incident, some or all variables had been supplied for a total of 3,030 offenders. The average incident with offender information involved 1.5 offenders.

Table 19 summarises the type of victims involved in incidents cross-tabulated with the number of offenders associated with that incident. Around two-thirds of incidents with offender information (67%) involved only a single offender, although this varied with victim types. For instance, 55 percent of incidents with multiple victims involved lone offenders compared with 72 percent of incidents involving lone organisational victims.

Lone offenders might target certain types of organisations rather than people because the individuals representing an organisation may be less likely to resist for a range of reasons (for example, retail staff may have been advised to comply with offenders or they may have been alone at the location in question). This account is plausible: an examination of the locations where lone offenders robbed lone organisations (n=567) shows that 39 percent were in unspecified retailers and 23 percent occurred in service stations. Further, even though these predominantly occurred in retail locations that could be assumed to operate during conventional business hours, 57 percent of armed robberies of lone organisations occurred after 6.00 pm but before 9.00 am, times when minimal staff and customers would be expected in most retail settings.

As was the case with the 2004 analyses, data concomitantly suggest multiple individual victims are more likely to be targeted by multiple offenders: 45 percent of incidents with multiple individual victims involved more than one offender. This may be because greater offender numbers allow for better control of the situation: increased numbers make for more intimidation and a decreased likelihood of victim resistance. Research from the United Kingdom into the methods and motivations of street robbers indicates that increased numbers also act as a type of insurance policy: some offenders chose to operate in groups because the costs (such as having to split financial takings) are offset by the benefit of guaranteed back-up should victims resist (Deakin et al. 2007).

Table 19: Number of offenders[a] involved in armed robberies of different victim types as a percentage of victim type, 2005[b]

Victim type	Offender count 1	2	3	4	5	Total number
One individual	64	21	8	3	3	996
One organisation	72	19	4	4	1	785
Multiple individuals	55	26	10	5	3	134
Multiple organisations	71	29	0	0	0	7
One organisation and one individual	75	15	8	2	0	61
One organisation and multiple individuals	100	0	0	0	0	7
Total (percent)	**67**	**20**	**7**	**4**	**2**	**1,990**

a: Excludes incident records for which offender information was not supplied. Based on offender information for first listed victim in incident.

b: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]

Table 20: Number of offenders[a] and weapons[b] involved in armed robberies as a percentage of offender count, 2005[c]

Weapon	Offender count 1	2	3	4	5	Total (percent)
Firearm	11	12	11	23	15	12
Knife	58	53	55	35	49	56
Syringe	6	3	3	3	0	5
Other weapon	12	21	23	32	28	16
Non-specific or missing	13	10	8	7	8	12
Total number	**1,341**	**407**	**132**	**71**	**39**	**1,990**

a: Excludes incident records for which offender information was not included. Based on offender information for first listed victim in incident.

b: Based on most serious weapon listed in derived weapon combination, assuming order of seriousness of firearm, knife, syringe and other weapon

c: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]

Presumably armed robbers acting alone are less able to effectively intimidate victims, especially multiple victims, and it could be expected that they might arm themselves with highly threatening weapons such as firearms. However, both current and earlier NARMP analyses suggest the opposite. Offenders acting alone or in groups of two or three used knives in the majority of armed robberies in which they were involved (Table 20). A higher percentage of robberies involving offender groups of four used firearms compared with smaller groups or lone armed robbers.

These counterintuitive findings might reflect the fact that lone offenders could engage in highly opportunistic armed robbery, taking advantage of likely targets (that is, less secured with low expected resistance) when they arise and making use of whatever weapon is at their disposal or easily obtained. Some offender groups may more carefully select targets and plan the offence, and part of this planning may be obtaining more serious weaponry. An examination of the locations where associated armed robberies occurred hints that this could be the case (although very different numbers of contributing incidents make strong conclusions impossible). Thirty percent of incidents with lone offenders using knives (n=775) took place in unspecified retailers, 15 percent in service stations and 14 percent in the street. Of the 16 firearm robberies involving four offenders, one-quarter took place in residential settings and three (19%) in licensed premises, yet only one occurred on the street and in a service station (of the 25 knife robberies with four offenders, one-fifth were street robberies).

Offender demographics

Armed robbery research consistently shows that most offenders are young males (see for example, Willis 2006). Data summarised in Table 21 highlight that around nine in every 10 offenders were male and 95 percent were under 40 years of age. Nearly two-thirds (62%) of all offenders were males aged 18 to 39 years.

Table 21: Age and gender of offenders[a] as a percentage of gender, 2005[b]

	Gender		
Age group	**Male**	**Female**	**Total (percent)**
< 15 years	5	9	6
15 to 17 years	21	23	22
18 to 19 years	13	6	12
20 to 24 years	22	21	22
25 to 29 years	17	17	17
30 to 34 years	10	11	10
35 to 39 years	7	7	7
40 to 44 years	2	2	2
45 to 49 years	2	1	2
50 to 54 years	1	0	1
55 to 59 years	< 1	1	< 1
60 to 64 years	0	0	0
65 years and over	0	0	0
Total number	**2,723**	**281**	**3,004**

a: Based on up to five listed offenders, for first listed victim in incident. Excludes offenders with age and/or gender missing or not supplied. Excludes incident records for which offender information was not included.

b: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]

Offender groups tended to consist of individuals who were similarly aged. Of the 649 incidents involving more than one offender, 70 percent included all co-offenders in the same broad age–gender grouping (that is, males versus females aged under 18, aged 18 to 34 years, 35 to 59 years, or 50 years of age and over). Given that most armed robbers are young men, it is to be expected that the largest number of incidents with similarly aged co-offenders involved males aged between 18 to 34 years (n=218; 34%).

The types of weapons used by male and female offenders and co-offenders of various ages are summarised in Table 22. Results suggest there was little variation in the patterns of weapon use as a function of the various age and gender groupings. At least half of armed robberies committed by offenders in all age groups involved knives. There is some suggestion of gender differentiation, although the categories in question contain only a very small number of cases. For example, incidents involving girls less than 18 years had the highest percentage of knife robberies (83%), and regardless of age, female offenders and co-offenders were involved in a relatively higher percentage of syringe robberies than males or mixed gender groups. Firearm robberies made up less than 20 percent of incidents for most age–gender groups, although firearm robberies constituted one-quarter of those committed by men aged over 50, and mixed gender groups aged less than 18, and 35 to 49 years.

Table 22: Most serious weapon[a] used in incidents as a percentage of gender and age category[b] for offenders and offender groups, 2005[c]

	Weapon				
Gender and age	Firearm	Knife	Syringe	Other weapon	Total number
Males offender(s)					
< 18 years	7	63	1	29	(263)
18 to 34 years	14	66	6	15	(962)
35 to 49 years	16	63	5	16	(167)
50 years and over	25	56	0	19	(16)
Multiple age categories	18	54	1	27	(140)
Total for males	**13**	**64**	**5**	**18**	**(1,548)**
Female offender(s)					
< 18 years	0	83	3	14	(29)
18 to 34 years	11	51	29	9	(55)
35 to 49 years	7	57	21	14	(14)
50 years and over	0	100	0	0	(2)
Multiple age categories	0	100	0	0	(3)
Total for females	**7**	**63**	**19**	**11**	**(103)**
Mixed gender offender(s)					
< 18 years	25	50	0	25	(12)
18 to 34 years	17	62	17	5	(42)
35 to 49 years	25	50	0	25	(4)
50 years and over	0	0	0	0	(0)
Multiple age categories	16	55	10	19	(31)
Total for mixed gender groups	**18**	**57**	**11**	**13**	**(89)**

a: Based on most serious weapon listed in derived weapon combination, assuming order of seriousness of firearm, knife, syringe and other weapon. Excludes incident records missing or unspecified weapons.

b: Percentages do not necessarily total 100 because of rounding

c: Based on up to five listed offenders, for first listed victim in incident. Records with information concerning only one offender are included in the relevant gender/age category. Excludes offenders with age and/or gender missing or not supplied. Excludes incident records for which offender information was not included.

Source: AIC NARMP 2005 [computer file]; n=1,740

The average age of offenders was 24 years, identical to the average age observed for armed robbery offenders in 2004. However, average age did vary with incidents in different locations and involving different numbers of offenders, but the patterns of variation were similar to those observed in the previous year. For example, lone offenders tended to be older on average than those who acted in groups: 27 years for single offenders versus 17 years for groups of five (average ages were 27 and 18, respectively, in 2004). In both

years, on average the oldest offenders were associated with robberies in banking and financial settings (31 years currently, 30 years in 2004), and pharmacies and chemists (32 years currently, 30 years in 2004).

Table 23: Average offender age in years[a] for armed robberies in each location by number of offenders involved in incident, 2005

	Offender count					Overall	
Location	**1**	**2**	**3**	**4**	**5**	**Average**	**Number**
Residential	27	27	26	24	18	25	185
Recreational	24	20	16	16	18	20	44
Transport related	24	20	17	18	15	20	139
Open spaces (excluding street and footpath)	20	19	17	–	14	18	11
Street and footpath	23	21	21	18	17	21	349
Educational, health, religious, justice and other community	23	34	18	12	16	22	21
Administrative and professional	26	24	31	–	–	27	17
Wholesalers, warehouses, manufacturing and agricultural	27	18	–	–	–	22	3
Retail	27	25	22	24	17	26	478
Banking and financial	32	32	22	33	23	31	39
Pharmacies and chemists	32	32	28	–	–	32	59
Service stations	27	22	19	17	18	24	277
Licensed premises	29	28	24	24	17	27	83
Newsagents and post offices	27	26	21	–	–	26	42
Corner stores, supermarkets and takeaways	28	22	21	22	21	25	203
Unspecified and other	26	22	18	18	–	24	38
Average age for count	**27**	**23**	**21**	**21**	**17**	**24**	**1,988**

a: Average derived from information for up to five listed offenders, for first listed victim in incident. Excludes offenders with missing age. Excludes incident records for which offender information was not included or not supplied and/or missing location.

– No records in sub-category

Source: AIC NARMP 2005 [computer file]

Although very small numbers contributed to these latter averages, it is possible that the two locations are targeted by very different types of older offenders: those who may act more opportunistically, alone or in pairs, and target less secure premises (such as pharmacies) but are prepared to accept smaller takings; and those who act in groups and target more lucrative but high-risk settings (such as banks and other financial settings). Table 18 shows

that pharmacy robberies result in lower average offender dollar gains than armed robberies in financial settings. They are subject to a lesser percentage of firearm robberies than banks and other financial settings (Table 15). A larger percentage of incidents in pharmacies also result in the theft of alcohol and other drugs but not cash (Table 17). A breakdown of weapon use data further suggests that 83 percent of the 46 robberies by lone offenders in pharmacies involved a knife. In contrast, seven of the 11 incidents (64%) in financial settings involving more than one offender were firearm robberies.

Conclusion

Despite changes in the level of detail and the way some information is analysed, NARMP findings are consistent with those observed in earlier years. This suggests that the features of Australian armed robberies have not changed markedly over the three years that the NARMP has been collecting data.

A previously developed typology of armed robbery in Australia suggests there are at least three types of incidents, spanning a continuum from opportunistic to professional. These can be differentiated by the degree of offender planning, evidenced in incident features such as location, weapon or victim type (see Borzycki, Sakurai & Mouzos 2004). Current findings are also consistent with these types. As noted in the Introduction, however, armed robberies in residential premises may represent a qualitatively different type of incident, characterised by the presence of some sort of pre-existing victim–offender relationship. The case study that follows examines this in detail.

A routine activity approach shifts the focus away from why individuals may choose to commit certain offences (why they may be motivated), to why certain situations are more vulnerable to the occurrence of certain crimes. The typologies used to profile Australian armed robberies do not consider why offenders choose to commit armed robbery but do nonetheless assume certain offender factors may motivate them to engage in varying degrees of planning and preparation before offending. While a detailed discussion of offender motivation is beyond the scope of this report and indeed, beyond the nature of the data currently compiled in the NARMP, the issue of offender motivation is directly relevant to any research into armed robbery.

A note on offender motivations

In recent months, public discussion about drug use and crime has focused on possible links between methylamphetamine and violent offending (for example, Police blame ice for rise in robberies, *Sydney Morning Herald*, 1 December 2006; Ice fuels Sydney armed robbery epidemic, *The Australian*, 1 December 2006). The causal link between the two was

hypothesised because of observed apparent increases in robbery in a subset of metropolitan areas in New South Wales (although no significant upward or downward trends in armed and unarmed robbery in all of New South Wales have been found over the longer term; see Goh, Moffatt & Jones 2007). As yet, there is no strong evidence to indicate that apparent increases in robbery in Australia, or that changed patterns of violent offending in general, are directly linked to increases in methylamphetamine use (see for example, McKetin et al. 2006).

Unfortunately most crime statistics, including the NARMP, do not incorporate sufficient information about offending and offender motivation to allow causal links to be established. A review of earlier Australian and international research into robbery concluded that it may be possible to differentiate between armed robbery offenders who engage in regular, high levels of drug use and those who take few or no drugs (Willis 2006). Other research, such as the Drug Use Monitoring in Australia (DUMA) program may provide some insights into the way certain drugs may motivate and influence offending behaviours. For instance, a small sample (n=71) of violent and/or property offenders detained by police in 2006 who admitted to being under the influence of methylamphetamine were asked how the drug impacted on their behaviour. Around three-quarters responded that the drug helped them to 'be more confident or have more courage' and to 'be more effective or more capable' (see Mouzos et al. 2007).

Ongoing refinements to the nature and detail of information contained in the NARMP may one day include national information about the role of alcohol and other drugs in armed robbery. Quantitative population data of this sort would be a valuable complement to in-depth findings derived from research into subsets of offenders.

Case study: armed robbery of residential premises

Robbery is generally thought of as taking place in public locations such as the street, shops or other commercial settings. The public location reflects the fact that compared with other violent crimes, robberies seem to be more random and anonymous: persons are victimised because they happen to be in the location that is targeted by the offender, not because they as specific individuals are targets. Robberies in residential locations may be less random and less anonymous. Presumably only the least rational, most opportunistic of offenders would randomly select residential premises without some prior knowledge of the possible gains and the likely resistance they might encounter. The NARMP 2004 dataset suggested that a higher percentage of victimisations in residential locations involved prior victim–offender relationships compared with other locations. Of those with relationship information, 39 percent who had some known prior relationship were robbed in residences (Borzycki 2006).

Home invasion is a term commonly employed by the media to describe sometimes violent robberies in which residents are confronted by offenders in their own homes. Unfortunately, as noted elsewhere, jurisdictional differences in legislation and crime recording practices make it hard to gain an understanding of how common this is and what it involves (see OCSAR 1999; Salmelainen 1996). The level of detail contained in the NARMP means that the following case study cannot isolate residential armed robberies that tally with the sometimes sensationalist portrayal of home robberies in the media, from those that could rightly be classified as home invasion in some legal sense, or those that might more readily be categorised as robberies taking place near residences. Additionally, because of the small number of incidents involved in the following case study, results should be seen as at best, broadly illustrative of all armed robberies in or near residences.

A total of 490 armed robberies in residential premises were recorded in the NARMP (8% of incidents, comparable with the 7% recorded in 2004, despite issues of national representativeness). Not surprisingly, given the private nature of the location, 87 percent of incidents involved only person victims. A single victim (either organisational or individual) was recorded in 87 percent of incidents. Of those 156 victims for whom injury information was available, 52 percent were annotated as involving no injury and seven percent as involving serious injury. Minor injuries were noted for 28 percent of victims, and emotional trauma for 13 percent (a smaller percentage of victims, regardless of location, were noted as having no injury; Table 5).

A breakdown of offender data shows that relative to incidents in all other locations, slightly larger percentages of residential robberies involved more than one offender (Figure 2). Other findings include:

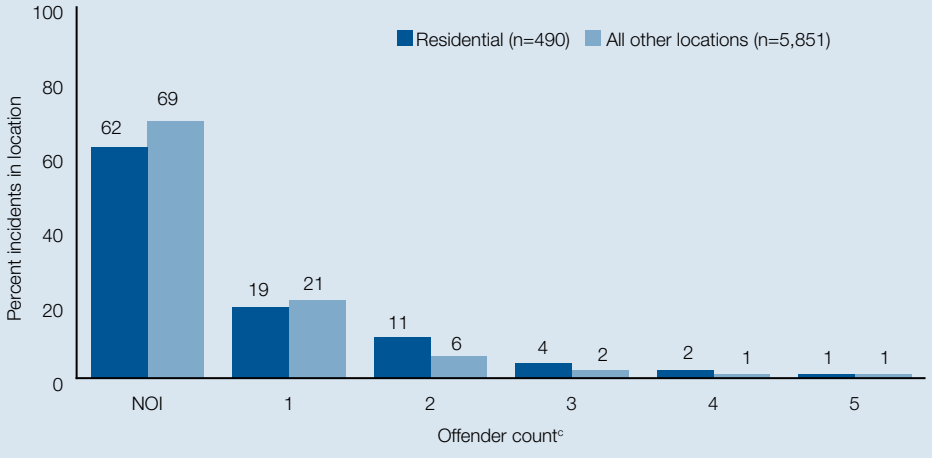
- Four out of every 10 victims and offenders were known to each other when the robberies took place in residential locations. Only 10 percent of relationships were known when considering all other locations (Figure 3). Interestingly, this means around 60 percent of offenders in residences were not known to victims.

- A slightly higher percentage of firearm robberies and slightly lower percentage of knife and syringe robberies occurred in residences when compared with overall percentages regardless of location (Table 15). The different pattern of weapon use was most pronounced among groups of three or four offenders (Table 24; see also Table 20).
- Stolen property combinations that included cash made up less than, or about half of, the incidents regardless of the most serious weapon used (Table 25), whereas 60 percent of all incidents regardless of location involved the theft of cash (see Table 16).
- Table 18 shows an average of $1,887 stolen from residences. The overall average regardless of location was $1,273. Thirty percent of residential robberies resulted in the theft of items valued at more than $500, an identical figure to that for robberies in all other locations (Table 26).

Despite seeming differences in victim–offender relationships (less anonymity), weapon use (more serious weapons), offender numbers (more offender groups) and types of stolen property (less cash), the value of property stolen in residential robberies was not markedly higher than that obtained in other locations.

As noted earlier, the NARMP is not currently capable of addressing issues of offender motivations. However, this case study hints that residential robberies may not be wholly profit-driven: similar takings to other locations despite a greater apparent knowledge of the specific victims (seen in prior relationships), and presumably more intimidation (more serious weapons, less likelihood of a suitable guardian). These additional motivations – which could be more effectively examined elsewhere using more descriptive, qualitative information – might include revenge or victim intimidation as an end in itself.

Figure 2: Number of offenders linked to residential armed robberies[a] as a percentage of location, 2005[b]



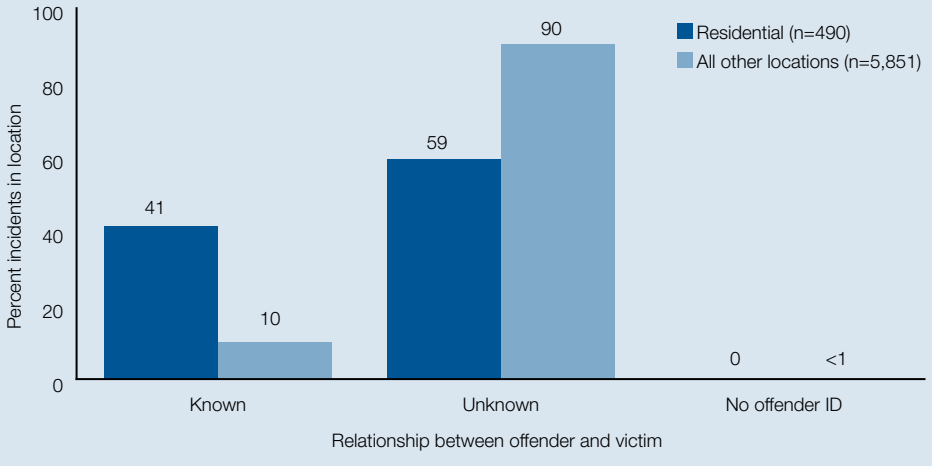
a:# Excludes incident records for which offender and/or location information was not included. Based on offender information for first listed victim in incident.

b: Percentages do not necessarily total 100 because of rounding

c: NOI – includes incidents for which an offender had not been identified or apprehended, which were not finalised or which were finalised without offenders being proceeded against

Source: AIC NARMP 2005 [computer file]

Figure 3: Relationship between offender and victim[a] in residential armed robberies as a percentage of location, 2005[b]



a: Some incidents included information about multiple offenders therefore total number of offenders exceeds the number of relevant incidents. Excludes incident records for which offender, relationship and/or location information was not included. Based on valid relationship information for all listed individual victims in incidents, for all incidents that involved at least one person victim.

b: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]

Table 24: Most serious weapon[a] used in residential armed robberies by number of offenders involved in the incident as a percentage of offender count, 2005[b]

	Weapon					
Offender count[c]	Firearm	Knife	Syringe	Other	Non-specific or missing	Total number
NOI	18	47	2	24	8	304
1	15	50	3	14	18	94
2	15	44	2	25	15	55
3	26	42	0	11	21	19
4	33	25	8	33	0	12
5	17	17	0	50	17	6
Total (percent)	**18**	**46**	**2**	**22**	**11**	**490**

a: Based on most serious weapon listed in derived weapon combination, assuming order of seriousness of firearm, knife, syringe and other weapon. Excludes incident records where property information was not supplied.

b: Based on offender information for first listed victim in incident. Percentages do not necessarily total 100 because of rounding.

c: NOI – includes incidents for which an offender had not been identified or apprehended, which were not finalised or which were finalised without offenders being proceeded against

Source: AIC NARMP 2005 [computer file]

Table 25: Types of property stolen[a] by most serious weapon used in residential armed robberies as a percentage of weapon, 2005[b]

Property type	Weapon				
	Firearm	Knife	Syringe	Other weapon	Non-specific or missing
Cash	46	52	43	46	47
Negotiable documents	4	8	0	3	0
Identity documents	0	6	0	5	0
Luggage	7	10	0	12	6
Electrical equipment	22	14	43	17	31
Jewellery	7	0	0	7	6
Alcohol and other drugs	2	4	14	3	3
Weapons	2	1	0	0	0
Personal items not classified elsewhere	0	2	0	2	0
Conveyances and accessories	0	1	0	5	6
Other property not classified elsewhere	11	2	0	0	0
Total number	**46**	**107**	**7**	**59**	**32**

a: Derived from first listed victim for incident because in the majority of victim records, property information is not linked to individual victims but to the incident itself. Property type categories are hierarchical: the first category captures all property combinations in which cash was listed, the second captures all combinations including negotiable documents but excluding cash, and so on. Electrical equipment includes mobile phones and accessories.

b: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]; n=251

Table 26: Total dollar value of property stolen[a] in residential armed robberies as a percentage of location,[b] 2005

Property value	Residential	All other locations
nil	28	22
less than $50	11	11
$50 to $99	8	6
$100 to $199	8	9
$200 to $499	15	22
$500 to $999	7	14
$1,000 to $1,999	7	7
$2,000 to $4,999	8	4
$5,000 to $9,999	5	2
$10,000 to $19,999	2	1
$20,000 to $49,999	1	1
$50,000 to $99,999	< 1	< 1
$100,000 and over	< 1	< 1
Total number	**260**	**2,570**

a: Derived from first listed victim for incident because in the majority of victim records, property information is not linked to individual victims but to the incident itself. Excludes incident records with missing total value and/or location.

b: Percentages do not necessarily total 100 because of rounding

Source: AIC NARMP 2005 [computer file]; n=2,830

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Technical appendix

National Armed Robbery Monitoring Program glossary

Armed robbery: the ABS delineates between armed robbery (involving a weapon) and unarmed robbery (no weapon used). Only armed robbery is of relevance to the NARMP. Also see *robbery* below.

Actual offences that can be classified as armed robbery differ among Australian jurisdictions because of differing criminal codes. The coding scheme employed by the ABS – the Australian Standard Offence Classification (ABS 1997) – allows varying offences to be grouped into categories. Those categories of relevance to the NARMP are aggravated robbery, non-aggravated robbery, and robbery not further defined.

Weapon use is central to establishing which offences are included in the NARMP. For the purposes of the NARMP, a weapon is broadly defined in accordance with the ABS (see *weapon* below).

Incident: the ABS defines a criminal incident as:

> … one or more offences (and their related victims and offenders) which are grouped into the same unique occurrence if they are committed by the same person or group of persons and if:
>
> - they are part of actions committed simultaneously or in sequence over a short period of time at the same place
> - they are part of interrelated actions; that is, where one action leads to the other or where one is the consequence of the other(s)
> - they involve the same action(s) repeated over a long period of time against the same victim(s) and come to the attention of the police at one point in time (ABS 2005: 40).
>
> The same broad definition of an incident is used for compilation of the NARMP but with the following exclusions:
>
> - incidents where different victims (sometimes threatened with different weapons or in different locations) are robbed by the same offender(s) within a short period of time
> - repeat victimisations of the same individual(s) or organisation(s) by the same offender(s), with long periods intervening between the armed robberies.

Location: 'The initial site where an offence occurred, determined on the basis of its use or function' (ABS 2007: 50). For the purposes of the NARMP, broad location categories include:

- residential: private and commercial residences, includes yards and external structures

- recreational: includes sporting facilities but excludes premises explicitly flagged as retail or licensed
- transport related (includes terminals, conveyances in transit, and car parks)
- open spaces (excludes street and footpath)
- street and footpath
- educational, health, religious, justice and other community
- administrative and professional
- wholesalers, warehouses, manufacturing and agricultural
- retail (excludes all retail premises included in the following categories)
- banking and financial (includes automatic teller machines not attached to banking and financial premises)
- pharmacies and chemists
- service stations
- licensed premises (includes licensed clubs, pubs, taverns, nightclubs and bottle shops)
- newsagents and post offices
- corner stores, supermarkets and takeaways
- unspecified and other.

Offender: the terms *offender(s)* and *armed robber(s)* are used interchangeably to refer to alleged perpetrators of armed robbery offences, even if those individuals have not been convicted of those offences.

Robbery: consistent with the ABS, robbery involves:

> … the unlawful taking of property, with intent to permanently deprive the owner of the property, from the immediate possession of a person, or an organisation, or control, custody or care of a person, accompanied by the use, and/or threatened use of immediate force or violence (ABS 2007: 51).

Victim: consistent with the ABS, a robbery victim:

> … may be either an individual person or an organisation. Where the robbery involves an organisation or business, the element of property ownership is the key to determining the number and type of robbery victims. If the robbery only involves property belonging to an organisation, then one victim (i.e. the organisation) is counted regardless of the number of employees from which the property is taken. However, if robbery of an organisation also involves personal property in an employee's custody, then both the organisation and employee(s) are counted as victims (ABS 2007: 52).

A person traumatised by, or witness to, a robbery whose property is not targeted, although a victim in the broader common-sense use of the term, is not a victim for the purposes of the NARMP. In addition, the term victim is used throughout this report to refer to the person(s) or organisation(s) victimised in an alleged armed robbery, regardless of whether related offences were later proven.

Generally, victim records are included in the NARMP if actual offences were subsumed by any of those Australian Standard Offence Classification categories listed for armed robbery and some form of weapon use was also recorded, although there are some exceptions. Victim records are excluded if offences:

- are classified as aggravated robbery but weapon information shows no weapon use or not applicable (the use of a weapon in the commission of a robbery is considered one, although not the only, aggravating circumstance, hence all offences involving weapons could technically be considered aggravated)
- are classified as robbery not further defined or non-aggravated robbery, recorded with no weapon use, or where weapon information has not been supplied or is annotated as missing. A minority of victim records classified as non-aggravated robbery or robbery not further defined also recorded use of a weapon, and these have been retained.

Finally, also consistent with the ABS:

> Where a victim is subjected to multiple offences of the same type within a distinct criminal incident, e.g. in the case of robbery this may be due to attacks by several offenders, the victim is counted only once (ABS 2005: 33).

Weapon: as per the ABS, a weapon is:

> … any object used to cause injury or fear of injury. It also includes imitation weapons and implied weapons (e.g. where a weapon is not seen by the victim but the offender claims to possess one). Parts of the body such as fists or feet are not included (ABS 2007: 53).

The broad categories of weapon considered in the NARMP generally tally with ABS categories, namely:

- firearm, including imitation firearm
- knife
- syringe
- other weapon, which subsumes the recently introduced ABS categories (ABS 2007) of:
  - bottle/glass
  - bat/bar/club
  - chemical.

There are minor differences between broad NARMP and ABS weapon categories. For example, the NARMP categorises a screwdriver as a knife, while the ABS classifies it other weapon.

National Armed Robbery Monitoring Program method

Police services in all Australian jurisdictions extract from police administrative information systems unit record data relating to victims of armed robberies reported during the reference period. Electronic data files from each of the jurisdictions are forwarded to the AIC, where they are reformatted and recoded as necessary to achieve, as far as is possible, a uniform national victim dataset. The final victim dataset is contained and analysed within STATA, a statistical software package.

Jurisdictions cannot extract identical variables in all instances, nor can they always extract equivalent levels of detail or equivalent values for those variables that are produced in common. Raw data undergo considerable recoding and reformatting, and new variables are created from supplied raw data where necessary, before being submitted to analyses. Table T1 details the core variables, the number of valid records for each, and where relevant, the categories within each variable employed in the victim analyses conducted for this report.

Table T1: Variables and valid cases in the 2005 NARMP victim dataset

Variable description	Valid records[a]	Values[b]
Unique victim reference number	7,162	
Offence code	7,210	Aggravated robbery Non-aggravated robbery Robbery not further defined
Organisational identifier flag	7,208	Individual victim Organisational victim
Victim age at incident	5,028	
Victim date of birth	4,484	
Victim gender	5,100	
Relationship of first listed offender to victim	1,554	Known to victim Unknown to victim No offender identified
Relationship of second listed offender to victim	161	Known to victim Unknown to victim No offender identified
Relationship of third listed offender to victim	63	Known to victim Unknown to victim No offender identified

Table T1: continued

Variable description	Valid records[a]	Values[b]
Relationship of fourth listed offender to victim	31	Known to victim Unknown to victim No offender identified
Relationship of fifth listed offender to victim	14	Known to victim Unknown to victim No offender identified
Injury to victim	1,203	No injury noted Injury not further defined Minor injury Major injury Death Emotional trauma
Unique incident reference number	7,210	
Date incident reported	7,209	
Date incident occurred/started	7,210	
Month incident occurred	7,210	
Year incident occurred	7,210	
Day of week on which incident occurred	7,210	
Time of day when incident occurred/started	7,210	
Date incident ended	5,132	
Time incident ended	5,121	
Location where armed robbery occurred	7,208	Residential settings Recreational settings (excluding licensed premises) Transport-related settings Open spaces (excluding street and footpath) Street and footpath Educational, health, religious, justice and other community settings Administrative and professional settings Wholesalers, warehouses, manufacturing and agricultural settings Retail (including not further defined and not elsewhere classified) Banking and financial Pharmacies and chemists Service stations Licensed premises Newsagents and post offices Corner stores, supermarkets and takeaways Unspecified and other locations not classified elsewhere
Licensed premises flag	6,506	Licensed premises Premises not licensed

Table T1: continued

Variable description	Valid records[a]	Values[b]
First listed weapon used in incident	6,927	Firearm Knife Syringe Other weapon
Second listed weapon used in incident	346	Firearm Knife Syringe Other weapon
Third listed weapon used in incident	19	Firearm Knife Syringe Other weapon
Date of incident clearance	975	
Investigation outcome/clearance status at data extraction/at 180 days	6,505	Not finalised Finalised, no offender proceeded against Finalised, offender proceeded against Other outcome
Property taken incident, first type listed	3,821	No property stolen Cash Negotiable documents Identity documents Luggage Personal electrical equipment (including mobile phones) Jewellery Alcohol and other drugs Weapons Personal items not classified elsewhere Conveyances and accessories Other property not classified elsewhere
Property taken incident, second type listed	1,629	Cash Negotiable documents Identity documents Luggage Personal electrical equipment (including mobile phones) Jewellery Alcohol and other drugs Weapons Personal items not classified elsewhere Conveyances and accessories Other property not classified elsewhere

Table T1: continued

Variable description	Valid records[a]	Values[b]
Property taken incident, third type listed	1,113	Cash Negotiable documents Identity documents Luggage Personal electrical equipment (including mobile phones) Jewellery Alcohol and other drugs Weapons Personal items not classified elsewhere Conveyances and accessories Other property not classified elsewhere
Property taken incident, fourth type listed	814	Cash Negotiable documents Identity documents Luggage Personal electrical equipment (including mobile phones) Jewellery Alcohol and other drugs Weapons Personal items not classified elsewhere Conveyances and accessories Other property not classified elsewhere
Property taken incident, fifth type listed	617	Cash Negotiable documents Identity documents Luggage Personal electrical equipment (including mobile phones) Jewellery Alcohol and other drugs Weapons Personal items not classified elsewhere Conveyances and accessories Other property not classified elsewhere
Value of property taken in incident, first property type listed	1,751	
Value of property taken in incident, second property type listed	493	
Value of property taken in incident, third property type listed	325	
Value of property taken in incident, fourth property type listed	229	

Table T1: continued

Variable description	Valid records[a]	Values[b]
Value of property taken in incident, fifth property type listed	173	
Total value of property stolen incident	3,042	
Unique reference number for first listed offender	1,414	
Unique reference number for second listed offender	497	
Unique reference number for third listed offender	173	
Unique reference number for fourth listed offender	84	
Unique reference number for fifth listed offender	23	
Age of first listed offender at time of incident	2,267	
Age of second listed offender at time of incident	752	
Age of third listed offender at time of incident	280	
Age of fourth listed offender at time of incident	125	
Age of fifth listed offender at time of incident	45	
Date of birth, first listed offender	2,028	
Date of birth, second listed offender	683	
Date of birth, third listed offender	257	
Date of birth, fourth listed offender	117	
Date of birth, fifth listed offender	41	
Gender, first listed offender	2,267	
Gender, second listed offender	752	
Gender, third listed offender	280	
Gender, fourth listed offender	125	
Gender, fifth listed offender	45	

a: Refers to the number of valid, non-missing victim records for which data were supplied or able to be derived from supplied variables

b: Listed values for categorical variables are those appropriate for the level of detail available in all victim records for which data were supplied or able to be derived from supplied variables. Some jurisdictions were able to supply greater detail for certain variables (for example, weapon or location types) but these more detailed variables were generally not employed in national-level analyses.

Source: AIC NARMP 2005 [computer file]; n=7,210

The incident-based data file is created from victim records: victim records are combined into a single incident record using the shared incident identifier supplied by jurisdictions. Incident information such as location, weapon use, and incident time and date did not agree among all the victims associated with an incident in a small minority of cases. When victim information differed on only a single variable, the relevant variable in victim records was amended to show consistent information (for example, incident time amended to show the earliest incident time).

A small number of victim records could be grouped into single incidents by police incident identifiers but were disaggregated into separate incidents for the purposes of the NARMP. This occurred when:

- different victims were robbed by the same offender(s) and so grouped as a single incident but detailed examination showed that they were threatened with different weapons in different locations or at different times
- the same individual(s) or organisation(s) were victimised repeatedly (sometimes by the same offenders) and so grouped together, but detail showed there were long periods intervening between the armed robberies.

After processing, there were 6,341 incident records in the incident-based file examined for this report.

National Armed Robbery Monitoring Program data limitations

Jurisdictional consistency

What constitutes a single reported crime victim is not uniform across jurisdictions. With respect to the ABS RCV, it has been noted that:

> Some jurisdictions almost always record a reported criminal incident on their crime recording system, whereas other jurisdictions apply a threshold test prior to a record being made (e.g. whether the victim wishes to proceed against the offender, or the seriousness of the incident). These thresholds vary across jurisdictions and are not currently guided by national standards (ABS 2005: 31).

Given that NARMP data are extracted by police services using similar protocols to those employed for the RCV (ABS 2005), issues raised concerning the RCV are directly relevant to the compilation of the NARMP.

The overarching Australian Standard Offence Classification scheme (ABS 1997) allows the grouping of disparate offences across Australian jurisdictions. Nonetheless, offences are not

defined identically in all states and territories. Other variables are also inconsistently defined (for example, raw values relating to relationships between victims and offenders), and so although they can be collapsed into higher-level categories such as those employed in the RCV, these categories do not necessarily convey all the information available.

Given all factors, jurisdictional comparisons are not made in this report but jurisdictional information is available to relevant police staff within jurisdictions via a secure internet website.

Representativeness of victim and offender records in the National Armed Robbery Monitoring Program

Not all crime events that take place are reported to, or detected by, police. This means the NARMP cannot describe armed robberies and armed robbery victims that do not come to police attention. Not all armed robberies will result in the apprehension of offenders and logically, police data can only include information regarding offenders who have been apprehended and will exclude those who have, for whatever reason, avoided detection. Systematic factors may influence a victim's decision not to report crime; recorded crime as reported to police generally underestimates the level of victimisation compared with that reported in victim surveys (although this is thought to be less pronounced with armed robbery relative to other types of offences). Systematic factors may also influence whether offenders avoid apprehension, or if apprehended, are not proceeded against. These systematic factors are important in our understanding of armed robbery but are well beyond the scope of the NARMP.

Victim counts do not precisely tally with those provided in the RCV (ABS 2006a). Discrepancies among the data sources indicate that slightly different selection criteria were applied when police services extracted victim records for the two datasets.

For the purposes of the NARMP and RCV, robbery victims are those persons or organisations whose property was the target of an attack. By definition, organisations can only be involved in a robbery through property ownership. A person traumatised by, or witness to, a robbery whose property is not targeted, although a victim in the broader common-sense use of the term, is not a victim for recorded crime purposes. It appears that some individuals who were witness to and/or traumatised by (but not actually the owners of targeted property) the robberies of organisations may have been incorporated in the dataset. To overcome this, all individual victims reported as additionally involved in an incident in which an organisation was robbed of property in a jurisdiction and who were not flagged as having only traumatic (as opposed to a financial) involvement in the incident were excluded from the 2005 dataset for the purposes of this report. A number of these exclusions may be valid victims who did have property removed, but as no means were available to distinguish this, the conservative rule described above was applied.

Some jurisdictions were able to supply information about whether included victims were subject to completed or to attempted armed robberies. As these data were not available for all records, this variable was not examined for this report. Some aspects of robbery, victim or offender may differentiate completed from attempted robberies, but these are not explored in this report.

The investigative status (or outcome) variable initially contained information very similar to that reported in the RCV (that is, outcome at 30, 90 or 180 days). To achieve greater precision, some jurisdictions are able now to supply information about investigative outcomes at the time of data extraction, plus the dates those outcomes were achieved. These cannot be supplied by all states and territories however, which means the precise time taken to achieve the various possible outcomes has not been calculated. Consequently, the outcomes reported were not necessarily achieved within the same timeframe for each record (that is, the time between incident report and outcome achieved varies among records). In a related fashion, the number of jurisdictions able to supply this information and the form it is provided in (ABS coding versus raw, local codes) have changed since the establishment of the NARMP. Summary findings making use of this variable should therefore be interpreted with caution and treated as only the most general indicator of outcome.

Data extraction protocols employed in some jurisdictions can result in the duplication of victim records (that is, victim records are supplied multiple times with few or even no differences between those records). All detected duplicate records were removed from the victim dataset, but in some instances it was not possible to definitively confirm all apparent duplications (for instance, when the victim was an organisation robbed in a retail setting). As a result, it is possible that the dataset contains duplicate victim records.

Finally, this report provides some information on repeat victimisation during the reference period. However, it is likely that this is an underestimate of actual repeat victimisations reported to police in Australia. The non-name victim identifiers provided to the AIC by some jurisdictions are not unique and universal to all states and territories. That is, they identify a victim in a particular incident but if that same individual or organisation is victim to another incident, a new identifier will be allocated. If a victim is subject to second or subsequent armed robbers in a different jurisdiction to that in which the first occurred, they cannot be identified as a repeat victim.

Because of the above, the analyses presented should be considered at best as only broadly indicative of all attempted and completed armed robberies, all armed robbery offenders, and all armed robbery victims.

Weapons, property, offenders and relationships described in the National Armed Robbery Monitoring Program

Where possible and relevant, jurisdictions supply information concerning up to three weapons used against victims, up to five involved offenders, up to five relationships between victim and offender, and up to five stolen property types and values. These do add to our knowledge of armed robbery by providing greater detail about the crime but should not be seen as definitive regarding every reported instance of armed robbery. Some jurisdictions cannot supply information concerning more than one of each of these elements, and records that may involve more than the maximum number of each of these elements are not flagged as such in the national dataset. This means that the true total reported number of weapons employed, offenders involved, or types of property stolen cannot be established.

Variables relating to the type and dollar value of stolen items could not be supplied by all jurisdictions. These variables are not mandatory fields for police officers when recording offence reports. Further, their accuracy is not necessarily later validated by police. Data do not, therefore, accurately describe the types and value of all property taken in all examined incidents. This caveat is especially important when considering certain sub-categories of robbery for which only single or a very small number of records were examined.

Changes to the National Armed Robbery Monitoring Program over time

As noted in the introduction to this report, as the NARMP has evolved, the nature of NARMP information has also changed, making fine-grained comparisons with earlier reports inappropriate. Some changes have arisen directly from stakeholder feedback, and others are the result of changes in the way states and territories compile information. Changes include:

- the inclusion of more detailed information in raw data forwarded to the AIC (for example, weapon type or location)
- the inclusion of additional variables to those initially specified (for example, victim and offender dates of birth)
- the supply of information that previously could not be supplied, by more or all jurisdictions (for example, unique offence identifier)
- the way some variables are derived. For example, analyses of weapon type in combination with other variables in 2003 and 2004 annual reports were usually based on the first listed weapon. All equivalent 2005 analyses employ the most serious weapon listed for that victim (or the first listed victim in an incident).

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The National Armed Robbery Monitoring Program (NARMP) aims to examine weapon use in armed robbery, and to monitor trends and patterns over time in the commission of the offence. Since 2003, state and territory police services have forwarded armed robbery data on agreed variables to the Australian Institute of Criminology for analysis and reporting. The collected information provides detailed national-level monitoring of trends, identifies changes in trends and highlights the factors responsible. Quantitative evidence is presented of victim and offender details, individual and organisational victim numbers, incident location and timing, weapon use, type of property theft, victim–offender relationship, offender motivations, and demographic information such as age and gender.

This report updates previous collection of armed robbery statistics at the national level. It provides an appraisal of trends and patterns in armed robbery and weapon use for the 2005 calendar year, and factors underpinning those trends. A comprehensive discussion is presented of the characteristics of victims and offenders, and patterns of incidents over time. Despite changes in the level of detail and how information is analysed, the findings are consistent with those observed since 2003. This shows that the features of armed robberies have not changed markedly over that time.