The Physical Requirements of General Duties Policing

A joint initiative of the Criminal Justice Commission and the Queensland Police Service

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Abbreviations

CJC	Criminal Justice Commission
CPR	Cardiopulmonary Resuscitation
EAR	Expired Air Resuscitation
OPM	QPS's Operational Procedures Manual
PCT	Physical Competency Test
PEAC	Police Education Advisory Council
POST	Police Operational Skills and Tactics
PROVE	Police Recruit Operational Vocational Education
PSE	Physical Skills Education
QPS	Queensland Police Service

Executive summary

Introduction

Ensuring that new police entrants have the right physical capabilities for the job is a priority for most police organisations, but little systematic research has been done to find out what the right physical requirements are, the extent to which they are required, or the context in which they arise.

With this study, the Criminal Justice Commission and the Queensland Police Service have made one of the first attempts to quantify the physical requirements of general duties police officers.*

Through use of a mail-back questionnaire to a random sample of Queensland Constables and Senior Constables, we have been able to examine the routine physical requirements of operational police work and draw conclusions about the most common and critical work police are called upon to do. Our findings have important implications for recruitment and selection policies, training and education programs, and workplace health and safety.

The survey, completed by 357 officers, collected data on:

- how officers spent their time during the last shift
- various physical activities they did over the year
- the amount and nature of injuries they received while on duty in the last year
- demographics, such as age, gender and area of duty.

Survey results

Physical requirements

- ❖ Seventy-five per cent of respondents gave their main duties during the last shift as patrol work. Other duties given were administrative (14%), watchhouse (6%), and investigative (4%).
- ❖ Most of the shift was spent sitting in a police vehicle or at a desk, with the rest of the time spent walking or standing; vehicles were climbed in and out of about 15 times and stairs used about four times.
- ❖ Over the previous 12 months, almost all respondents reported struggling with an offender (96%), with about half saying they had used either the lateral vascular neck restraint or a pressure-point control tactic, though not often.
- ❖ Around 85 per cent said they had been required to carry/move and restrain a person.
- ❖ Around 70 per cent reported having to break up fights and control crowds.
- ❖ Many reported having to carry objects, push cars, change tyres, climb fences, climb through windows, and run more than 30 metres.
- ❖ More than half said they had taken part in high-speed pursuits, either as driver or passenger, at least once in the preceding year.
- ❖ Thirty-six per cent had been required to draw a firearm, though only 16 per cent said they had pointed it at an offender and only 0.3 per cent of these had discharged a firearm at an offender.
- ❖ Thirteen per cent had used a baton and 7 per cent another striking weapon, usually a torch.

* The CJC became involved in this project because it has a statutory responsibility to oversee and review QPS procedures for selecting,

- A small proportion administered Cardiopulmonary Resuscitation (CPR) or Expired Air Resuscitation (EAR) — 3.3 and 4.4 per cent respectively.

Assaults and injuries

- A significant proportion of officers reported receiving assaults and injuries (mainly scratches, punches and kicks), usually while restraining an offender, but few required hospitalisation or time off work.

- Most officers also reported blood or saliva contact with offenders, indicating a potentially serious occupational health hazard.

Group differences

Group differences for physical activities and injuries were investigated by gender, age, re-joiner status (i.e. officers who indicated previous service in another jurisdiction), rank, location, and area of duty

- *Gender*

There were no significant differences between males and females in how often most activities were done (including the management of offenders, using restraints and breaking up fights), although more males than females reported moving furniture, climbing into ceilings, changing tyres, and being the driver in a high-speed pursuit. Similarly, there were no significant gender differences in the number of assaults and injuries incurred by respondents, indicating male and female general duties officers were exposed to similar occupational hazards.

- *Age*

Younger officers were more likely than older officers to chase offenders and carry/move noncompliant people. Younger officers also reported being kicked or injured more often. It may be that younger officers are more inclined, or more frequently requested, to perform more physical activities while on duty than their older colleagues. Studies in the community in general tell the same story: physical activity and associated injury tends to decline with age.

- *Re-joiner status*

Re-joiners were found to use handcuffs and other restraints more often than other respondents. A greater number of re-joiners were assaulted or injured (e.g. a strain or sprain).

- *Rank*

More Constables than Senior Constables reported using a physical restraint other than handcuffs, carrying or moving a noncompliant person, or pursuing an offender on foot. Constables were also more likely to spend more time in a police vehicle.

- *Location*

More officers working in country stations or in Aboriginal communities reported spending time in their vehicles. Fewer reported carrying or moving a noncompliant person when compared to provincial or metropolitan officers, possibly reflecting different policing styles and the absence of back-up support in smaller communities.

- *Area of duty*

Officers involved in criminal investigations were less likely than general duties officers to report assaults or injuries, or to have engaged in restraining an offender or dealing with public disturbances (such as breaking up a fight, crowd control, or use of pressure-point control tactics).

Implications

The findings from the survey have important implications for recruitment procedures, training and education programs, gender policies, and workplace health and safety.

Physical Competency Tests

Physical Competency Tests (PCTs) are used by every State police service in Australia. However, it has been argued that:

- some PCTs require a competency level that is considerably higher than that demanded of officers in the field
- many tests do not realistically represent what general duties officers do in the field
- such tests do not recognise the importance of teamwork to negotiate environmental obstacles
- some tests are unlawfully discriminatory.

The survey results lend weight to some of these criticisms. They confirm that police are exposed to a wide range of physical demands — such as moving noncompliant persons, running short distances and crawling under houses — but such demands are infrequent, generally less than one a month, and are usually short bursts rather than long engagements. Furthermore, survey respondents were rarely required to negotiate difficult obstacles, as required in PCTs, and most episodes were one-off rather than a series of events.

These findings suggest that a better approach may be to use a general health test, which requires an average level of fitness and an absence of illness, rather than requiring completion of a specific set of physical tasks that may not be representative of the everyday demands on police.

Training and education

The survey results highlight the need for some important training and education priorities. For example:

- The survey found that the management of noncompliant offenders was one of the most frequent and important physical demands placed on police officers, and that it was during such activities that officers were most likely to be injured. Therefore, teaching recruits and serving officers how to deal effectively with noncompliant offenders by using communication skills as well as physical restraints should be a high priority.
- The survey results indicated that general duties police officers need to have sufficient agility and fitness to sustain short periods of physical exertion. This should be the focus of physical skills education training programs, rather than endurance fitness and lengthy obstacle course negotiation, which are currently central to many police physical training programs.
- The survey found that a number of police officers were required to perform CPR and EAR while on duty. Although these life-saving procedures are not required often, it is important that when they are needed police can administer them confidently and effectively. Many police jurisdictions in Australia do not require maintenance of first aid qualifications (including CPR and EAR) once recruit training has been completed.

Women in policing

Policing has traditionally been a male-dominated occupation. The view that women are the ‘weaker sex’ has led to the belief that female officers are not as effective as their male counterparts in general duties policing, particularly where there is the potential for physical conflict.

The research reported here does not support the view that women are less able or willing to perform the physical requirements of policing. There were no significant gender differences in how often activities were performed, and only four activities where there were more males than females.

The survey results suggest that the inherent physical requirements of general duties policing are performed

equally by males and females and, therefore, do not support the use of PCTs that discriminate against women.

Workplace health and safety

Officers frequently reported being required to drag, lift and carry objects or people. As many strains, sprains and back injuries result from incorrect lifting and carrying techniques, adequate training and in-field supervision should be emphasised to minimise these types of avoidable injuries.

Survey findings indicate that assaults and assault-related injuries are common among police. This should be of concern to police managers, as injuries are costly to the organisation and the individual. There are also legislative requirements for organisations to provide the safest possible working environment for staff. Reduction in assault-related injuries can be achieved by educating officers in strategies to minimise physical contact with offenders, particularly those who may potentially act violently or aggressively.

The most common 'injury' or 'assault' was blood or saliva contact, which places officers at risk of exposure to diseases such as hepatitis. Police organisations should ensure that police are taught how to avoid exposure to body fluids — for example, by using communication and persuasion skills to reduce physical contact with offenders. There should also be education and training about infectious diseases, their modes of transmission, and treatment.

Future research

As with most research, this study has limitations that prevent it from providing a comprehensive picture of all aspects of the physical requirements of police work. Suggestions for further research to expand on these findings include:

- collecting more detailed information on the impact of shiftwork, the effectiveness of teamwork, and the prevalence of injuries from improper application of techniques
- assessing the extent to which effective communication and decision-making skills can reduce the need to rely on physical-control techniques.

Research strategies could include:

- direct observation of officers
- requiring officers to keep detailed logs of their activities.

1 Introduction

This research paper presents key findings from a survey of operational police in Queensland, which examined the physical requirements of police work. The survey, a joint initiative of the Criminal Justice Commission (CJC) and the Queensland Police Service (QPS), was distributed in January 1997 and completed by 550 Queensland police officers.

The aim of the survey was to help inform the development of policy and practice for the selection and training of recruits to the QPS. However, the results are also useful for the training and deployment of operational police, and the development of organisational strategies to enhance workplace health and safety.

This first chapter sets out the rationale for the research (including the statutory basis for the CJC's involvement), summarises the advantages and limitations of the research strategy used, and outlines the structure of the report.

Project rationale

It is well recognised that some occupations require more physical skill and ability than others; for example ambulance officers, defence service officers, firefighters and grocery warehouse workers (Hogan 1991a; 1991b). Policing is also an occupation that requires a certain level of physical skill to enable officers to control crowds, restrain offenders and conduct foot patrols.

In the past, the 'physical nature' of policing was used to justify height and weight restrictions for recruitment and selection. The introduction of equal employment opportunity and anti-discrimination legislation led to these restrictions being lifted for police and most other occupations. However, ensuring that new entrants to policing have the right physical capabilities remains a priority for most police organisations, as evidenced by the widespread use of Physical Competency Tests (PCTs) in recruit selection , and the considerable emphasis given to Physical Skills Education (PSE) in training police recruits.

Although the occupation of policing is widely seen as requiring certain physical skills and attributes, little systematic research has been conducted to find out the nature and extent of those requirements, or the context in which they arise. There is a clear need for more work to be done in this area to help inform policy and practice in:

- *recruit selection processes*

  It is important to make sure that police organisations are selecting people with the physical qualities necessary to be effective police officers; and conversely, that applicants are not being excluded on the basis of entry criteria that have not or cannot be validated. Under equal employment opportunity and anti-discrimination legislation, recruitment and selection tests must be justified by the inherent demands of 'the job'. Determining the physical capabilities required of a general duties police officer is a first step towards developing appropriate and valid procedures for selection of applicants on the basis of physical ability.

- *physical training requirements*

  PSE programs typically teach recruits the techniques and strategies required to execute competently the tasks required of a police officer (e.g. use of baton for self-defence, use of pressure-point control tactics to restrain a violent offender) and are usually also aimed at raising the general fitness of recruits. Research into the physical requirements of general duties policing can assist not only in the design of recruit-training programs but also in the design of in-service training for operational police because such research identifies the skills critical to successful policing.

- *women in policing*

  It is still a commonly held view in some police organisations — at both the managerial and rank-and-file level — that female police officers should not be deployed in certain types of operational work because they lack the strength and physical stature to deal with violent situations and noncompliant offenders. Comparison of the physical activities of male and female officers can help find out whether such views have any basis.

- *enhancing workplace health and safety*

  Information about the type of work done by police and the physical hazards to which they are exposed can also assist police organisations to devise strategies to reduce health and safety risks (e.g. by identifying physical activities that may increase the risk of an officer contracting illnesses such as Hepatitis C).

Statutory basis for CJC involvement

The survey was initiated as part of a joint QPS–CJC review of recruit selection policies and procedures, being conducted under the auspices of the Police Education Advisory Council (PEAC). As such, the primary focus was on collecting data that would assist PEAC to assess the appropriateness of the recruit selection processes and standards used by the QPS. However, much of the data obtained are also relevant to the other issues outlined above.

Under section 23(h) of the *Criminal Justice Act 1989*, the CJC has responsibility for:

> providing the commissioner of the police service with policy directives based on the commission's research, investigation and analysis, including with respect to law enforcement priorities, education and training of police, revised methods of police operation, and the optimum use of law enforcement resources.

The Commission has interpreted this section as including the making of recommendations and the provision of advice.

Also relevant is section 56 (3)(f)(iv), which states that one of the functions of the Research Division is to:

> review on a continuing basis the effectiveness of programs and methods of the police service, in particular in relation to … matters affecting the selection, recruitment, training and career progression of members of the police service and their supporting staff.

Research strategy: Advantages and limitations

Information about the physical requirements of an occupation can be collected by one or more of the following means:

- directly observing people while they are working
- having the people themselves keep detailed logs of their activities over a specified period
- surveying or interviewing a sample of people about the type of work they do
- analysing organisational records, such as health-and-safety and injury reports.

The choice of method will depend partly on the research questions asked, and partly on logistics and cost.

The present study used a mail-back questionnaire, which asked respondents how often they had done various activities during their most recent shift, the last month and the previous year. This format was chosen primarily because it was a relatively cheap and quick way of obtaining data from a broad sample of Queensland police officers. Using a mail-back questionnaire, instead of face-to-face interviews, also enabled police in all regions of the State to be surveyed.

The major limitations of this research strategy were:

- Respondents' ability to recall when and how often they did different kinds of physical activities varied. In particular, as discussed in chapter 3, there appeared to be a tendency for respondents to underestimate their involvement in high-frequency activities.
- Because of the need to keep the survey format as short and simple as possible, it was not practical to collect information about the context in which respondents engaged in various activities, or the sequencing of those activities. Similarly, we were unable to determine how critical it was for officers to do the activity in question — for example, it may be that younger officers ran greater distances than older officers because they were fitter rather than because running was critical for completion of the activity.
- The survey provided valuable information about the physical activities that general duties police officers did, but was unable to tell us whether the course of action taken by officers in a given situation was necessarily the best one.
- The survey did not consider shiftwork and its potential impact on physical activity and injury.

A specifically designed observational study would almost certainly have generated more comprehensive and accurate data, but such a study would have been extremely resource intensive and time consuming, especially given the wide variety of activities engaged in by police and the fact that policing work is not confined to a specific location. Similarly, there would have been major logistical difficulties in having a large sample of officers maintain detailed activity logs for any length of time.

Structure of the report

The report is organised as follows:

- Chapter 2 describes the study methodology, including how the survey instrument was developed and how the sample was selected. It also briefly describes the characteristics of the respondents.
- Chapter 3 provides a broad overview of the results, focusing on how frequently various activities were performed, and the nature of injuries sustained by respondents.
- Chapter 4 compares responses across gender, age, re-joiner status, rank, location, and area of duty.
- Chapter 5 discusses the policy implications of the survey findings, and it calls for further research in the area.

2 Methodology and sample characteristics

This chapter covers the development of the survey instrument; the sampling strategy and response rate; the characteristics of the sample; and the presentation of statistical data.

Development of the survey instrument

Information from the training manual for the PSE component of the Police Recruit Operational Vocational Education (PROVE) program at the Queensland Police Service Academy was used to develop the survey questions. A first draft of the survey was circulated to:

- police officers from the Academy, including the PSE program coordinator
- police officers and staff members from the Human Resources Division of the QPS
- several operational police officers
- members of the PEAC subcommittee set up to review recruitment and selection processes for the QPS.

Consultation resulted in several changes to the survey, which was then piloted with a group of 20 police officers attending a training course at the Academy. After completion of the survey, officers were asked to take part in a group discussion on the topics covered and to complete a short feedback form. In particular, they were asked to comment on the strengths and weaknesses of the survey and name any activities that were overlooked. Their comments resulted in minor changes to the survey.

The final survey instrument contained three sections relevant to examining the physical demands of policing (see appendix A):[1]

Survey Instrument

Section A: Demographics

Respondents were asked 11 questions relating to basic demographics such as age, gender, rank, and years of experience.

Section B: Physical demands

Respondents were asked to indicate how much time they had spent on, or how often they had performed, a range of physical activities across two time periods. Specifically, respondents were asked:

- how much time was spent during the **last shift** in daily physical activities (e.g. walking and driving)
- the number of times over the **last year** they had engaged in 36 physical activities ranging from low to high frequency (e.g. swimming, discharging a firearm, and high-speed pursuits)
- where their last struggle with an offender occurred and how long it lasted.

As an internal check on the reliability of the estimates being provided for the preceding year, respondents were also asked about the frequency of five of the 36 physical activities for a shorter period of **one month**. The five activities were chosen because they were expected to be ones that police would engage in frequently. The comparison of estimates for the last month and last year demonstrate the extent to which recall errors affect the data for high-frequency activities.

Section C: Injuries received

Respondents were asked to indicate the number of times over the **last year** they had been assaulted and injured while on duty.

Sampling strategy and response rate

The survey was distributed to a random sample of 1,000 Queensland police officers of the rank of Constable and Senior Constable. These ranks were targeted because the purpose of the survey was to collect information on the physical requirements of general duties policing. The sampling strategy ensured the sample was balanced for both gender and rank (see appendix B). Table 1 shows the total number of officers who received surveys, broken down by rank and gender.

The survey was sent to each officer with an accompanying letter, which described the purpose of the research and gave an assurance that responses would be treated confidentially. A follow-up letter was sent about four weeks later to remind officers to complete and return the survey.

From the sample, 550 surveys were returned, indicating a response rate of 55 per cent (see table 2). Not all responses were suitable for inclusion in the analyses — five were excluded because they indicated their rank to be Sergeant or above and a further 188 because they stated that they worked in areas other than general duties policing (e.g. teaching, training, special response units). The resulting sample comprised 357 officers with 316, or 89 per cent, indicating their main area of work to be general duties policing. The remaining officers were performing watchhouse duties (16) or traffic duties (25) at the time of the survey, but were included in the sample because such duties are usually rotated with general duties.

A small number of responses to individual questions — less than 1 per cent — were deleted because they were considered outliers; that is, responses more than two standard deviations away from the next closest score *and unexpected* considering the position held by the respondent (e.g. a general duties officer who reported climbing into ceilings 50 times over the year). Conversely, frequencies that were high *but expected* remained in the data set (e.g. a watchhouse officer who reported moving or dragging a drunk or noncompliant person 80 times over the year).

The sampling process adopted for this report was aimed at obtaining a representative sample of all general duties police officers in Queensland, to enable valid inferences and generalisations to be drawn about the physical requirements of general duties policing. Although a 70 per cent response rate is preferable for generalisation, there are no reasons to suspect any systematic bias in the final sample or that officers who did not return the survey differed from respondents in what physical activities they did at work. Hence, we are confident that the findings of this survey can be generalised to general duties policing.

Table 1 — QPS officers who received surveys, by rank and gender

	Rank		**Gender**			
			Female		***Male***	
Constable	567	(57%)	140	(14%)	427	(43%)
Senior Constable	433	(43%)	108	(11%)	325	(32%)
Total	**1,000**	**(100%)**	**248**	**(25%)**	**752**	**(75%)**

Table 2 — Response rate and exclusion of respondents

Number of surveys mailed out	1000
Number of surveys returned	550
Surveys excluded on the basis of rank	5
Surveys excluded on the basis of area of work	188
Final sample	**357**

Characteristics of the sample

Respondents were from all areas of the State with 135 from metropolitan stations, 125 from provincial stations, and 91 from small country stations or Aboriginal communities. Six officers did not respond to this question. Twenty-nine, or 8 per cent, indicated they had prior service in another policing organisation.

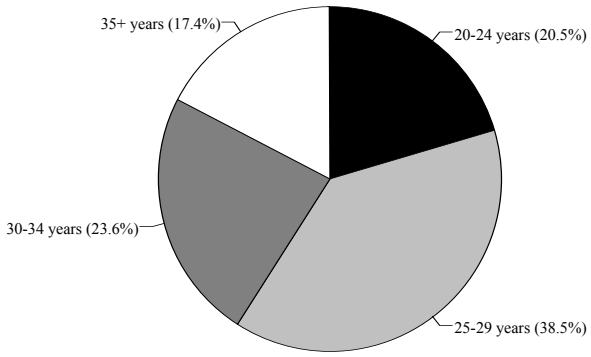
As shown in table 3, 16 per cent of the sample were females and 64 per cent were Constables. They ranged in age from 20 to 49 years, with the average age being 29.2 years (see figure 1). Their experience in general duties policing ranged from six weeks to 22 years with the average being 5.5 years.

Table 3 — Respondents by rank and gender

	Rank		Gender			
			Female		*Male*	
Constable	229	(64%)	47	(13%)	181	(51%)
Senior Constable	128	(36%)	11	(3%)	117	(33%)
Total	**357**	**(100%)**	**58**	**(16%)**	**298**	**(83%)**

Note: One Constable did not indicate gender.

Figure 1 — Age of respondents



Note: n = 356: One respondent did not indicate age.

Presentation of statistical data

The bulk of the report findings are presented as percentages, means, and medians. The 'mean' is simply the average (that is, the sum of the scores divided by the number of scores) while the 'median' is the value below which 50 per cent of the data fall. The terms 'mean' and 'average' are used interchangeably in the report.

Many of the questions in the survey asked respondents to indicate the number of times they performed an activity or were assaulted or injured. For these types of questions, two sets of data were calculated:

(i) the number of officers who responded to the question (i.e. gave an answer other than zero), regardless of the frequency indicated by the respondent — this data set is referred to throughout the report as 'percentage who did'

(ii) the mean (average) number of times each activity was performed or number of assaults or injuries received — all respondents who indicated they had not performed an activity or received an assault or injury were excluded.[2]

This report also compares the findings from different groups. When making such comparisons, there is always the possibility that the differences between groups are merely the result of chance. Statistical tests such as significance levels enable us to estimate the likelihood of this happening by showing the percentage likelihood that differences between groups are the result of chance. For example, 0.01 level means that there is less than a 1 per cent likelihood.

The significance level most commonly used in social science research is 0.05. However, in this study, only differences that were significant at the 0.01 level are reported. The more stringent significance level was selected to minimise the occurrence of what are known as Type 1 errors.

A Type I error is defined as a conclusion or decision to reject the null hypothesis when the null hypothesis is true (Pagano 1994). In the context of this study, this means a Type 1 error would be the indication of a statistically significant difference between two or more groups when there is not a 'real' difference.

Where the average scores for two groups of officers are reported, a one-way analysis of variance (ANOVA) was used to test for differences between the groups. Where significant differences were found between three or more groups, post hoc tests were used to identify which groups differed from each other. Where proportions are reported, chi-square tests were used. Where significant differences were found between three or more groups, scores were converted to standardised z scores. Z scores that were 1.96 or higher were used to identify groups that were over- or under-represented.

3 Results — Overview

This chapter provides an overview of the findings, as they relate to: how time was spent during the last full shift; the physical activities engaged in by respondents; reliability of year-long estimates for high-frequency activities; and assaults and injuries.

How time was spent during the last full shift

In accordance with the nature of the sample, most officers described their main duties during their last full shift as 'patrol duties' (75%), followed by 'administrative/office duties' (14%). The remainder comprised 'watchhouse duties' (6%), 'investigative duties' (4%) and 'other' (1%). The 'other' category consisted of three officers who were in training and one officer who was acting as the shift supervisor.

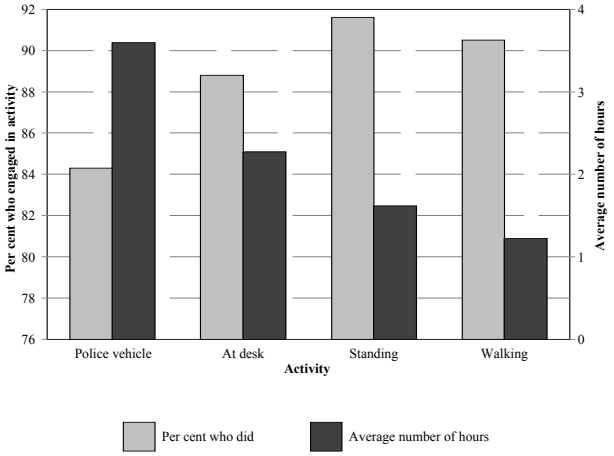
Officers were asked to indicate, in hours and minutes, how much time they had spent during the shift walking, standing, driving or sitting in a police vehicle or at a desk. As expected, most said they had spent some time performing each of these activities (see figure 2). The greatest amount of time was spent 'driving or sitting in a police vehicle': on average, 3.6 hours, or approximately half of their shift. The next most time-consuming activity was sitting at a desk: on average, 2.3 hours. Although walking and standing were the most common activities, they accounted for the least amount of time during the shift: only 1.2 hours and 1.6 hours respectively. When asked to indicate how much time they had spent using other police transport, such as a horse, boat, or motorcycle, 36 (10%) reported using some other form of transport for an average of 1.8 hours on the last full shift.

Respondents were also asked to specify 'other' activities they may have spent time on during the last full shift. Thirty-one (9%) reported spending time on some 'other' activity for an average of 1.7 hours per shift. Examination of the responses showed that officers were either sitting somewhere other than their desk or car (e.g. crime scene, court room) or did not provide information that would reveal whether they were sitting or standing (e.g. performing watchhouse duties).

In addition to walking, standing and sitting, officers are sometimes required to perform other routine activities during the course of a shift. The average number of times officers reported getting 'in/out or on/off a vehicle or other police transport' was 14.9 times per shift. Approximately half of the respondents (49%) reported climbing 10 steps or more, on the last shift, with an average of 4.3 times per shift.

In summary, the results show that a general duties police officer is required to perform a number of low-demand physical activities regularly each shift (e.g. driving, getting in and out of police transport, sitting). Although each of these activities may not in itself be strenuous, performing them collectively each day at work can require an average level of fitness. It was beyond the scope of our research to assess other work performance factors that may also place physical demands on officers, such as the continual performance of shiftwork.

Figure 2 — How time was spent during the last full shift



Notes:

1. Respondents who had not performed the activity were excluded from the calculation of the mean number of hours.
2. n = 357
3. Sample includes officers who worked longer than the standard shift of eight hours.

Physical activities performed

Officers were asked to indicate the number of times they had performed 36 physical activities over a year (see appendix C). Table 4 shows the proportion of respondents who indicated they had engaged in each activity and how frequently (presented as both the median and mean number of times). Activities are presented in descending order from most to least common.

Table 4 — Type and frequency of activities performed over the last year

Activity	Last year (n=338)		
	% who did	No. of times	
		median	*mean*
Carry/move a noncompliant person	88.5	10.0	13.3
Apply physical restraint, other than handcuffs	87.9	7.0	11.8
Put handcuffs on a noncompliant offender	85.2	5.0	8.8
Break up a fight	75.7	5.0	9.3
Run less than 30 metres	75.4	4.0	5.4
Climb over a fence higher than 1 metre	74.6	4.0	6.8
Run 30 metres or more	74.3	2.0	3.9
Engage in crowd control	70.4	3.0	6.0
Be in a high-speed pursuit as driver	62.7	2.0	2.9
Be in a high-speed pursuit as passenger	62.4	2.0	2.7
Move a dead or injured person	62.1	2.0	3.4
Climb through a window	61.8	2.0	3.9
Lift/carry objects greater than 10 kg	61.2	4.0	7.5
Chase an offender any distance, negotiating at least one obstacle (e.g. fence, window)	59.8	2.0	3.6
Move furniture in a house (e.g. drug search)	58.6	5.0	7.0
Push a car more than 5 metres	54.7	2.0	2.4
Use a carotid neck restraint hold/lateral vascular neck restraint	54.4	2.0	4.1
Change a tyre on a vehicle	52.4	2.0	2.1
Use a pressure-point control tactic	47.3	4.0	6.3
Be involved in high-speed car pursuit *and* immediately afterwards pursue the offender(s) on foot	42.0	1.0	1.9
Crawl under a house	41.1	2.0	2.4
Draw a firearm	36.4	2.0	2.4
Climb into a ceiling	35.5	2.0	2.8
Administer first aid	35.2	2.0	3.3
Climb onto a roof	33.1	2.0	2.1
Push a person out of harm's way	29.6	3.0	5.8
Move a small animal carcass (e.g. cat)	19.8	1.0	2.3
Point firearm at an offender	16.3	1.0	1.6
Use a baton	13.3	1.0	1.9
Discharge a firearm at an animal	11.8	1.0	1.5
Move a large animal carcass without the aid of machinery	9.2	1.0	2.0
Use a striking weapon other than a baton	6.8	1.0	1.5
Administer EAR	4.4	1.0	1.1
Administer CPR	3.3	1.0	1.1
Swim more than 10 metres	3.0	1.5	2.1
Discharge a firearm at an offender	0.3	1.0	1.0

Notes:

1. Nineteen respondents who had less than 12 months' experience were not included in the analyses.
2. Mean and median values are based only on those respondents who stated they had engaged in the activity.
3. A complete table including ranges can be found in appendix C.

Management of offenders

The activities performed by most officers most frequently were those that involved the management of a noncompliant person. Around 85 per cent of respondents indicated they were required to carry, move or restrain a person. Around 70 per cent reported having to break up fights and control crowds. All these activities required physical skill in defensive and restraint tactics.

Almost all respondents (96%) could recall the last time they had struggled with an offender. Struggles were reported to last between 2.4 seconds and 30 minutes with the average estimated to be three minutes. When asked to indicate where the struggle took place, most (63%) said it began at the place where the offence occurred, while another 24 per cent said it began somewhere between the place of arrest and the police vehicle.[3]

The estimates of duration of the struggle should be interpreted cautiously. Anecdotal evidence from police officers suggests that struggles may seem to last longer than they actually do. Accurate estimates may be hindered because of other matters officers may be required to handle at the same time (e.g. ensuring the safety of themselves and the offender, watching for threats from others, the physical distraction of the struggle itself). Nevertheless, it is clear that struggling with an offender is a common event for the general duties police officer. Struggles may not last long, but their frequency emphasises the need for officers to be able to perform short bursts of strenuous activity requiring skill and technique, such as the quick application of a pressure-point control tactic or handcuffs.

Use of physical restraint and defence techniques

Strategies used by fewer officers in the management of offenders included:

- the lateral vascular neck restraint hold (54%)
- pressure-point control tactics (47%)
- a baton (13%)
- a striking weapon other than a baton (7%).

According to the survey, these types of techniques were used two to six times per year.

Physical restraints

All physical restraint tactics have the potential to be harmful to the noncompliant offender if applied incorrectly. However, the potential risk of injury to the offender increases with the use of techniques such as the lateral vascular neck restraint hold and pressure-point control tactics.[4] The technique preferred by most officers — the lateral vascular neck restraint hold — is a hold that can render a person unconscious. When used with a struggling person, it can accidentally be altered into a respiratory neck restraint hold (choke hold), which is considered dangerous because, in certain circumstances, it can be lethal.[5] Although the lateral vascular neck restraint hold was used by more officers, the average number of times it was used during the year was less than for pressure-point control tactics.

Before 1995, Queensland police officers were not trained in the use of pressure-point tactics. As the respondents in this sample ranged in policing experience from six weeks to 22 years, it is not surprising that many were not trained in the use of pressure-point tactics and, therefore, used the lateral vascular neck restraint hold.[6]

Use of batons

Twenty-three police officers (7%) reported using a striking weapon other than a baton, 16 indicating they used their torch. The QPS training program for the use of batons and other defensive and restraint techniques does not teach or condone the use of substitute weapons. However, by way of explaining this finding, it is important to note that at the time this survey was conducted, the QPS had not introduced extendable batons. Officers were most likely to make use of long batons.[7] QPS policy

states that long batons should be confined to motor vehicles and carried by officers only when performing a particular duty where the carriage of the baton is considered necessary.[8] Therefore, it is likely the use of torches instead of batons may have resulted from unexpected attacks or situations that occurred while officers were away from their vehicle and unable to fetch their baton. The recent issue of extendable batons worn on the utility belt will most likely reduce the incidence of officers using a torch or any other object as a striking weapon.

Other physical activities

A number of less common activities also require short bursts of moderately demanding activity. For example, lifting and carrying objects weighing more than 10 kilograms are not as demanding as managing a noncompliant person, but they do make similar physical demands on the officer. Other examples include moving a dead or injured person, moving furniture in a house, pushing a car and changing a tyre.

Many officers reported having to run distances up to 30 metres, sometimes further. It is likely that this demand arises from concern for the personal safety of people involved in such disturbances as pub fights or domestic violence — in other words, officers may run because of the urgency of the situation to which they are attending rather than to pursue a fleeing offender (e.g. running from vehicle to inside a premise where there is a disturbance). It is also possible that the other commonly reported activity — climbing a fence greater than one metre — sometimes occurred in these types of situations. For example, an officer may arrive at a fenced residence where a domestic fight can be heard and, concerned for a person's safety, jump the fence rather than spend time looking for the latch on the gate.

High-speed pursuits

Respondents reported participating in high-speed pursuits more frequently than expected. Approximately 63 per cent said they had participated as a driver and 62 per cent as a passenger. In total (for this 12-month period), the respondents indicated involvement in more than 600 high-speed police pursuits (606 as a driver and 573 as a passenger). Additionally, 42 per cent of respondents reported chasing an offender on foot after a high-speed pursuit. However, this happened infrequently: on average, twice a year.

There is no formal system for recording the occurrence of pursuits in Queensland to help us make an accurate comparison, but the Police Communications Centre does provide an approximate figure by counting 'called-in' pursuits.[9] In 1995–96, a total of 207 police pursuits were 'called-in' to the Centre for the metropolitan regions (source: Police Communications Centre, QPS). In comparison, the 135 metropolitan region officers in this sample reported 266 pursuits as a driver and 259 as a passenger. The respondents in this survey represent only 12 per cent of Constables and Senior Constables in the metropolitan regions, suggesting the frequency of high-speed pursuits, at least in the metropolitan regions, may be significantly higher than indicated by QPS 'called-in' data.[10] The number of pursuits may be even higher, as the survey specifically asked about 'high speed' pursuits rather than 'general' pursuits.[11]

Use of firearm

Several questions were asked about the use of firearms (see table 5).

Table 5 — Proportion of officers using a firearm

Use of a firearm	% who did n=338
Draw a firearm	36.4
Point a firearm at offender	16.3
Discharge a firearm at an animal	11.8
Discharge a firearm at an offender	0.3

As expected, the most common activity was for respondents to draw their firearm. Those who reported drawing their firearm did so an average of 2.4 times per year. Almost half of this group reported pointing their firearm at an offender, but with a lower average of 1.6 times per year. The least common activity was to discharge a firearm at an offender, reported by only one respondent. A small proportion of officers, mostly from country stations, reported discharging their firearm at an animal.

Medical assistance

First aid was administered by 35 per cent of respondents over the last year, at an average of 3.3 times a year. A smaller proportion of officers reported that they had administered Cardiopulmonary Resuscitation (CPR) or Expired Air Resuscitation (EAR). Although not frequently required, CPR and EAR are critical life-saving procedures. Situations that may require an officer to perform these procedures include arriving at an accident before the ambulance, and being called to an incident where a person has been injured or has attempted suicide.

Reliability of year-long estimates for high-frequency activities

Officers were asked to report frequencies for five activities for both the last month and last year. Month-long data were collected on these five activities because they were expected to be high-frequency activities for general duties policing. Comparison of month-long and year-long data suggests that the frequency of some activities may have been underestimated by respondents (see table 6).

For example, officers reported putting handcuffs on a noncompliant offender an average of three times in the last month but only 8.8 times in the last year. If the year's average was calculated on month-long data, the average for the year would be 30 (i.e. 10 x 3), considerably higher than reported by respondents in the survey.[12]

These data are consistent with other research showing that it is difficult for respondents to estimate accurately the number of times they have done something that they do often, especially over a long period (Brown 1995). Estimates for low-frequency activities, such as administering CPR or swimming, are probably more accurate because they happen less often.

Another factor contributing to the disparity between month-long and year-long data is the time of the year when the survey was administered. Most respondents (419) returned the survey by 29 January 1997, indicating that month-long estimates would probably have included the Christmas–New Year period, a period usually characterised by a greater number of good order offences, such as disorderly conduct, language offences, indecent behaviour and resist/hinder arrest. For example, monthly crime trends for Queensland show offences against the person in December 1996 to be higher than those recorded for other months, such as June and July 1997 (QPS 1997). It is these types of offences or behaviour that require police officers to implement offender-management strategies. Therefore, it is likely that the higher monthly estimates reflect to some extent the higher incidence of good order offences and offences against the person expected over the Christmas–New Year period.

Table 6 — Officers' estimates of frequencies for five activities: Last year and last month compared

Activity	Last year (n=338)		Last month (n=357)	
	% who did	*mean*	*% who did*	*mean*
Carry/move a noncompliant person	88.5	13.3	67.2	4.9
Apply physical restraint, other than handcuffs	87.9	11.8	67.8	3.9
Put handcuffs on a noncompliant offender	85.2	8.8	51.8	3.0
Break up a fight	75.7	9.3	50.1	3.6
Push a person out of harm's way	29.6	5.8	16.5	2.4

Notes:

1. Nineteen respondents who had less than 12 months' experience were not included in the analyses for the last year.
2. Mean values are based only on those respondents who stated they had engaged in the activity.
3. A complete table including ranges can be found in appendix C.

The discrepancy between month-long and year-long data calls for caution in interpreting the absolute frequency estimates. However, the interpretation of relative frequencies, such as the number of times an officer was required to handcuff an offender compared to the number of times the officer was required to swim, is most likely to reflect what is required in the field.

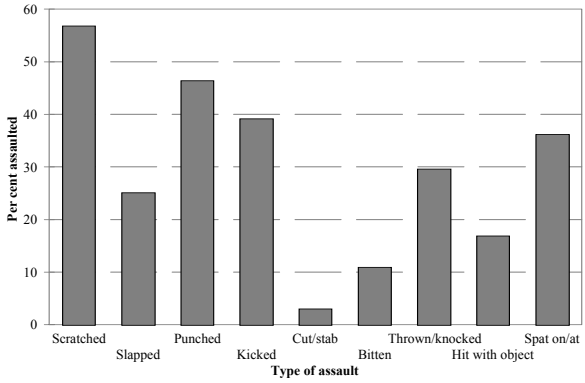
Assaults and injuries

To find out the types of occupational hazards facing general duties police officers, respondents were asked to indicate the types of assaults and injuries received over the last year while on duty (see appendix D).

Types of assaults

Officers were first asked to indicate the types of assaults sustained while managing offenders over the last year (see figure 3). Scratching, punching, kicking and being spat on were the most common types of assaults police reported receiving. The most common of these were being scratched and punched: on average, 3.2 times.

Figure 3 — Proportion of officers reporting different types of assaults from offenders



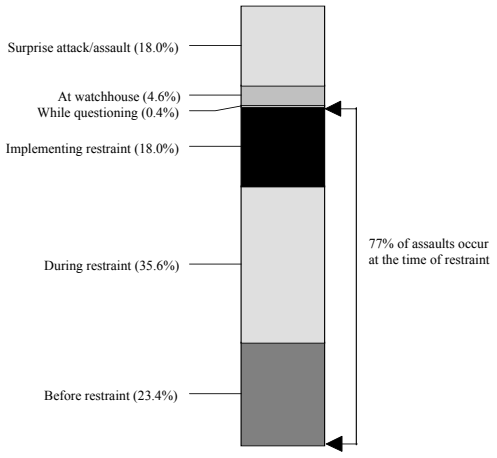
Notes:

1. Nineteen respondents who had less than 12 months' experience were not included in the analyses for the last year.
2. n = 338.

Context of assault

To identify the types of situations in which officers are assaulted, respondents were asked to record the context in which the most recent assault occurred. As shown in figure 4, 77 per cent of these assaults occurred at the time of restraint — either before (23%), during (36%), or while implementing the restraint device (18%). This finding indicates that officers are in most physical danger when trying to manage offenders physically, rather than when questioning or interviewing them.

Figure 4 — Context of most recent assault



Note: n = 261.

These findings are consistent with those of a CJC study of Workers Health and Safety Reports of assault-related injuries lodged by Queensland police officers (CJC 1996). This study found that most assault-related injuries sustained by police officers were the result of direct physical contact with another person and that injuries were most likely during the arrest and the act of physically restraining a person.

Types of injuries

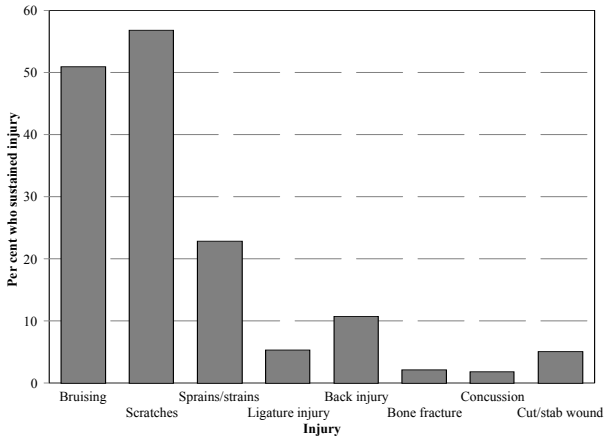
Respondents were also asked to indicate the types of injuries they sustained from assaults.

Figure 5 shows that the most common types of injuries received were 'scratches' (57%) and 'visible bruising' (51%). Those officers who sustained these injuries reported scratches an average of 3.1 times and bruising an average of 2.6 times in the last year. Only 5 per cent of officers reported a cut or stab wound. These findings are consistent with the 1996 CJC report, which found that most assault-related injuries sustained by police officers resulted from being hit or punched and that, contrary to popular belief, weapons were rarely used to inflict an injury on a police officer.

Respondents were asked to rate their most serious injury over the last year on a scale of 1 (not at all serious) to 7 (very serious). The average seriousness rating was 2.4, which suggests that, in general, police officers are not seriously injured. This is consistent with the 1996 CJC study, which found few officers who reported being injured required hospitalisation or were unable to attend work.

Respondents were also asked to indicate the number of times they had come into contact with the blood or saliva of another person in the line of duty. Most officers (63%) reported having had blood or saliva contact over the last year, with the average number of exposures being 5.1. This shows blood or saliva contact to be the highest occurring type of 'assault' or 'injury'. As shown in figure 3 (page 13), almost half the respondents reported being 'spat on/at' (36%) or 'bitten' (11%) in the last year. The 1996 CJC report found that there was a substantial increase in the number of police reporting assault incidents involving body fluids between 1990 and 1995.

Figure 5 — Proportion of officers sustaining injury over the last year



Note: n = 338.

Conclusion

Findings regarding the physical requirements of general duties policing:

- The police surveyed spent approximately half of their shift in a vehicle. Over the course of a shift, they were required continually to perform low-demand activities, such as getting in and out of a vehicle, standing, walking, and climbing stairs.
- There are a wide range of physical demands placed on police, but the activities performed by the greatest proportion of officers were those that involved the management of a noncompliant person — for example, carrying, moving, restraining, applying handcuffs, breaking up a fight and crowd control.

- Overall, officers were required to perform a variety of activities, such as lifting and carrying, in short, strenuous bursts (e.g. run short distance and struggle with an offender). By contrast, endurance-type activities, such as a long foot chase requiring the negotiation of several obstacles, were relatively infrequent.
- The number of respondents who reported involvement in high-speed pursuits was much higher than suggested by QPS records.
- Only one person in the sample was required to discharge a firearm at an offender; however, just over a third reported drawing a firearm. Sixteen per cent of the sample reported pointing a firearm at an offender. These findings reinforce the practice of annual firearms' training and testing.
- Some officers reported administering CPR and EAR in the line of duty. Although used infrequently, these are life-saving skills, which emphasise the importance of ensuring that serving officers are trained in first aid, CPR and EAR.
- Respondents appeared to have underestimated their involvement in high-frequency activities over the year. This is likely due, in part, to the difficulty most people have in recalling accurately how often common activities are done, especially over a long period such as a year.
- The discrepancy between month-long and year-long data is partly attributed to the time of the year the survey was administered; it is likely that the higher monthly averages reflect the increased demands placed on police officers during the Christmas–New Year season.

Findings regarding the types of assaults and injuries sustained by general duties police:

- Contrary to popular belief, weapons are rarely used to inflict an injury on a police officer. In the majority of cases, officers received injuries from assaults that occurred either before, during or while implementing a restraint.
- The most common types of assaults reported by officers were scratches, punches, and kicks. Similarly, the most common injuries sustained by officers were scratches and bruises.
- Officers reported a high incidence of blood/saliva exposure, proving this to be the most common 'assault or injury'. This finding emphasises the importance of workplace health and safety standards for minimising risk of exposure to diseases such as hepatitis.
- Few officers reported being seriously injured (i.e. requiring hospitalisation or being unable to work) over the course of the last year.

4 Results — Group differences

The data provided by the demographics section of the survey allowed comparative analyses on the basis of:

- gender
- age (20–24 yrs, 25–29 yrs, 30–34 yrs, 35+ yrs)
- re-joiner status (i.e. previous service in another jurisdiction)
- rank (Constable, Senior Constable)
- location (metropolitan, provincial, country/Aboriginal)
- area of duty (general duties, criminal investigation).[13]

Groups were compared on the proportion of officers who engaged in each activity (i.e. percentage who did) *and* on the frequency (i.e. average) with which each activity was performed. All group differences reported in tables 7–16 are significant at the 0.01 level.[14]

Gender

There were no significant differences between males and females in the frequency with which activities were performed. Gender differences in the proportion of officers engaging in activities were found for only four items (see table 7).

More males than females reported moving furniture and climbing into ceilings, which may reflect the greater involvement of male officers in investigative duties. More males reported being the driver in high-speed pursuits, which may reflect a greater inclination by male officers to respond to an incident by pursuit, or that males spend more time driving than do female officers.

Females are sometimes perceived as being less involved in, and having less ability to deal with, noncompliant or aggressive offenders. Of particular importance, therefore, is the absence of any differences between males and females in activities involving the management of offenders — for example, moving noncompliant offenders, using handcuffs or batons, applying pressure-point control tactics and breaking up fights.

An examination of injury data showed no significant gender differences, although a greater number of males reported suffering from more serious injuries, in particular strains, sprains and back injury. This trend is consistent with the 1996 CJC study that found that female officers incurred slightly fewer serious injuries than male officers. In the general population, the injury rate for males is 1.7 times higher than for females (Sherrard & Day 1995), but this has not been reflected to a significant degree in the occurrence of injuries reported in this survey. The absence of any strong gender differences is another indication that both males and females are equally exposed to the occupational hazards of general duties policing.

Table 7 — Gender differences in the proportion of officers engaging in activities

Activities in the last year	Percentage who did	
	Male (n=283)	*Female (n=54)*
Move furniture in a house (e.g. drug search)	61.8	42.6
Climb into a ceiling	39.2	16.7
Change a tyre on a vehicle	57.2	27.8
Be the driver in a high-speed pursuit	66.4	44.4

Note: Nineteen respondents who had less than 12 months' experience were not included in the analyses.

Age

Comparison of the four age groups showed several differences in the proportion of officers engaging in activities (see table 8).

Older police officers were less likely to engage in a number of activities and were less likely to be injured. Younger police officers were either more inclined, or were more frequently requested, to perform significantly more physical activities. The differences in the involvement of physical activities between younger and older officers is consistent with research that shows a decline in physical activity with age (Astrand 1992; Blair, Kohl, Gordon & Paffenbarger 1992).

Table 8 — Age differences in the proportion of officers engaging in activities

Activity/Injury	Percentage who did			
	20–24 yrs (n=73)	*25–29 yrs (n=137)*	*30–34 yrs (n=84)*	*35+ yrs (n=62)*
Activities in the last full shift				
Spent time in a police vehicle	90.4	86.1	88.1	67.7
Activities in the last month				
Carry/move a noncompliant person	79.5	65.0	71.4	51.6
Activities in the last year				
Run less than 30 metres	83.9	82.0	62.5	71.0
Run more than 30 metres	79.0	82.7	71.3	56.5
Chase offender and negotiate obstacle	71.0	65.4	60.0	37.1
Use a carotid neck restraint	58.1	62.4	52.5	37.1
Injuries in the last year	**Percentage of respondents**			
Kicked	53.2	30.1	48.8	30.6
Sustained an injury in the last year	83.9	76.7	80.0	54.8

Note: Nineteen respondents who had less than 12 months' experience were not included in the analyses for year-long estimates. The resulting number of respondents for activities and injuries in the last year were: 62 (20–24 years); 133 (25–29 years); 80 (30–34 years); 62 (35+ years).

Re-joiner status

Few differences were found between re-joiners and other respondents. However, re-joiners were significantly more likely than other officers to perform the three activities shown in table 9.

It is not clear why re-joiners engage in these particular activities more frequently, but it may be that they have a slightly different policing style.

Table 9 — Differences between re-joiners and others in the frequency of activities

Activities in the last year	Mean	
	Re-joiners (n=29)	*Others (n=309)*
Crawl under a house	4.2	2.2
Used handcuffs	19.0	7.8
Used other restraint	23.8	10.7

Notes:

1. Nineteen respondents who had less than 12 months' experience were not included in the analyses.
2. Mean values are based only on those respondents who stated they had engaged in the activity.

More re-joiners reported being punched and kicked, and sustaining sprain/strain injuries (see table 10). Arguably, a greater number of re-joiners may be more likely to sustain assaults because of greater physical contact with offenders, as suggested above by the more frequent use of handcuffs and other restraint devices.

Table 10 — Differences between the proportion of re-joiners and others reporting assault

Assaults and injuries in the last year	Percentage of respondents	
	Re-joiners (n=29)	*All others (n=309)*
Punched	72.4	44.0
Kicked	62.1	36.9
Sprain/strain	44.8	20.7

Note: Nineteen respondents who had less than 12 months' experience were not included in the analyses.

Rank

There were some differences between Constables and Senior Constables, and it is likely that these differences, to some extent, reflect the effect of age. The average age of Constables is 28 years while for Senior Constables it is 32 years. As discussed in the earlier section, there is a decline in physical fitness with age, which in part explains why younger officers perform more of the physical demands of general duties policing (see table 11).

More Constables than Senior Constables reported engaging in activities that involved dealing with offenders, such as using physical restraints other than handcuffs, foot pursuits, and carrying/moving a noncompliant person.

Apart from age, these differences may also reflect a greater likelihood for Constables to be rostered on patrol duties, particularly at busier times. Constables, therefore, may have greater exposure to offenders, a factor that could lead to a greater number using offender-management techniques. Another explanation may be that Constables, because of their relative inexperience, are not as adept at using communication skills, and therefore tend to make use of more physical strategies for managing difficult offenders.

More Constables than Senior Constables reported a fitness injury at the Academy. It is not clear why this should be so, but one possible explanation is that attendance at the Academy is more recent for Constables, who therefore may be better able to recall whether or not they had an injury.

Table 11 — Rank differences in the proportion of officers engaging in activities

Activity/Injury	Percentage who did	
	Constable (n=229)	*S/Constable (n=128)*
Activities in the last month		
Use other restraint	72.9	58.6
Carry/move a noncompliant person	73.4	56.3
Activities in the last year		
Run more than 30 metres	80.1	64.6
Chase offender and negotiate obstacle	66.4	48.0
Passenger in a high-speed pursuit	70.1	49.6
Injuries in the last year	**Percentage of respondents**	
Fitness injury at the Academy	63.8	48.4

Note: Nineteen respondents who had less than 12 months' experience were not included in the analyses for year-long estimates. The resulting number of respondents for activities and injuries in the last year were: 211 (Constables) and 127 (Senior Constables).

Differences were also found between Constables and Senior Constables in the average number of times they engaged in the activities shown in table 12.

These differences are consistent with Constables having greater exposure to general duties than Senior Constables — Constables spent more time in vehicles and getting in and out of vehicles than did Senior Constables.

Table 12 — Rank differences in the frequency of activities

Activity/Injury	Mean	
	Constable (n=229)	*S/Constable (n=128)*
Activities in the last full shift		
Time spent in a police vehicle (in hours)	3.8	3.2
Time spent at your desk (in hours)	2.0	2.7
Number of times in/out of police vehicle	16.1	12.6
Activities in the last year		
Changed a tyre on a vehicle	1.7	2.7

Notes:

1. Nineteen respondents who had less than 12 months' experience were not included in the analyses for year-long estimates. The resulting number of respondents for activities and injuries in the last year were: 211 (Constables) and 127 (Senior Constables).
2. Mean values are based only on those respondents who stated they had engaged in the activity.

Location

As expected, there were some differences between country, provincial and metropolitan police officers (see table 13).

A greater proportion of officers working in country/Aboriginal stations reported spending time in a vehicle compared to provincial/metropolitan officers. However, a smaller proportion of country/Aboriginal officers reported physically managing a noncompliant person. This may reflect a difference in policing style or approach, and differences in population numbers or crime rates. For example, because additional support staff for country stations may be some distance away, country police officers may avoid using physical-management strategies unless absolutely necessary. Differences in job requirements between locations may also contribute to the findings (e.g. more country police reported discharging their firearms at an animal). Fewer country officers reported being a passenger in a high-speed pursuit, which is probably because there is a greater reliance on single-officer patrols in rural areas.

Table 13 — Location differences in the proportion of officers engaging in activities

Activity/Injury	Percentage who did		
	Provincial (n=125)	*Metro (n=135)*	*Country (n=91)*
In the last full shift			
Spent time in police vehicle	80.8	81.5	94.5
Climb a set of stairs (more than 10 steps)	54.4	60.7	24.2
Activities in the last month			
Carry/move a noncompliant person	74.4	70.4	51.6
Activities in the last year			
Move a large animal carcass	8.2	2.5	18.9
Be a passenger in a high-speed pursuit	66.4	69.2	48.9
Discharge a firearm at an animal	13.1	5.0	20.0

Note: Nineteen respondents who had less than 12 months experience' were not included in the analyses for year-long estimates. The resulting number of respondents for activities and injuries in the last year were: 122 (provincial); 120 (metropolitan); 90 (country).

The slightly different demands of country, provincial and metropolitan policing were reflected in differences in the mean number of times each activity was performed (see table 14).

Interestingly, the reported duration of struggles was considerably longer for country police compared to provincial and metropolitan police. This may reflect a greater availability of assistance for metropolitan and provincial police when dealing with offenders, particularly if an offender becomes difficult.

Table 14 — Differences between locations in the frequency of activities

Activity/Injury	Mean		
	Provincial (n=125)	*Metro (n=135)*	*Country (n=91)*
In the last full shift			
Time spent walking (in hours)	1.1	1.5	0.9
Last struggle			
Last struggle with an offender (in minutes)	2.4	2.7	4.0
Activities in the last year			
Climb through a window	3.1	5.3	2.7
Administer first aid	2.3	4.8	2.3
Injuries in the last year			
Kicked	1.8	3.1	2.2

Notes:

1. Nineteen respondents who had less than 12 months' experience were not included in the analyses for year-long estimates. The resulting number of respondents for activities and injuries in the last year were: 122 (provincial); 120 (metropolitan); 90 (country).
2. Mean values are based only on those respondents who stated they had engaged in the activity.

Area of duty

Ninety-one respondents indicated their area of work to be criminal investigation, a sufficient number to enable comparison with the general duties area.

As shown in table 15, fewer criminal investigation officers reported engaging in activities that involved dealing with offenders and public order disturbances (e.g. restraining, breaking up fight, crowd control, use of pressure-point control tactics) or activities that would be expected when working in the broader community, such as administering first aid or moving a dead or injured person.

Fewer criminal investigation officers reported being assaulted and injured. On the other hand, criminal investigation officers were more likely to report that they had, during searches, climbed into ceilings, lifted and carried objects for confiscation, and moved furniture. Again, this is what would be expected for this group.

Comparison of mean differences also reflects, to a lesser extent, the different nature of general duties and investigative policing (see table 16).

General duties police officers spent more time in their car and used restraints more frequently, while criminal investigation officers performed crime-scene-related activities more frequently (e.g. carrying objects).

Table 15 — Work area differences in the proportion of officers engaging in activities

Activity/Injury	Percentage who did	
	General duties (n=357)	*Investigative (n=91)*
Activities in the last month		
Use handcuffs	51.8	28.6
Use other restraint	67.8	48.4
Carry/move a noncompliant person	67.2	27.5
Break up a fight	50.1	20.9
Activities in the last year		
Carry/move a noncompliant person	88.5	67.4
Break up a fight	75.7	57.3
Push a car more than 5 metres	54.7	39.3
Move furniture in a house	58.6	83.1
Climb into a ceiling	35.5	64.0
Carry objects more than 10 kg	61.2	87.6
Move a small animal carcass	19.8	6.7
Move a dead or injured person	62.1	31.5
Administer first aid	35.2	16.9
Engage in crowd control	70.4	41.6
Use handcuffs	85.2	61.8
Use other restraint	87.9	74.2
Use a pressure-point control tactic	47.3	24.7
Use a carotid neck restraint	54.4	33.7
Injuries in the last year	**Percentage of respondents**	
Scratched	56.8	32.6
Spat on/at	36.1	16.9
Scratches	56.8	31.5
Blood/saliva contact	63.3	39.3

Notes: Twenty-one respondents who had less than 12 months' experience were not included in the analyses for year-long estimates. The resulting number of respondents for activities and injuries in the last year were: 338 (general duties) and 89 (investigative).

Table 16 — Work area differences in the frequency of activities

Activity/Injury	Mean	
	General duties (n=357)	*Investigative (n=91)*
Activities in the last full shift		
Time spent in a police vehicle (in hours)	3.6	2.6
Time spent at desk (in hours)	2.3	3.3
Number of times in/out of police vehicle	14.9	9.6
Activities in the last month		
Use other restraint	3.9	1.8
Activities in the last year		
Move furniture in a house	7.0	12.4
Climb onto a roof	2.1	3.8
Carry objects greater than 10 kg	7.5	12.5

Notes:

1. Tweny-one respondents who had less than 12 months' experience were not included in the analyses for year-long estimates. The resulting number of respondents for activities and injuries in the last year were: 338 (general duties) and 89 (investigative).
2. Mean values are based only on those respondents who stated they had engaged in the activity.

Conclusion

Main findings of the group comparisons:

- There were surprisingly few differences found for each of the demographic and organisational variables examined. The greatest number of differences were found between general duties and criminal investigation police officers. This was to be expected given the different nature of the work.
- There were almost no differences between males and females. Most importantly, there were no differences for those activities that involve the management of offenders. The four activities where gender differences were found probably reflect a greater likelihood of male officers being in the types of situations where these activities would be required (e.g. investigative work or driving a vehicle).
- Older officers were generally less active and were injured less often when compared to younger officers. This is consistent with research that shows a decline in physical activity with age.
- There were few differences between re-joiners and the remainder of the respondents. The differences found showed re-joiners used handcuffs and other restraint techniques more frequently. More re-joiners indicated they had sustained a sprain/strain injury and had been punched or kicked.
- More Constables than Senior Constables reported engaging in activities that involved dealing with offenders. This may be partly the effect of age, but could also be influenced by rostering practices, which result in Constables working shifts where there is an increased likelihood of dealing with intoxicated and noncompliant offenders.
- There were some differences in the types of activities engaged in by officers according to location. In particular, officers in country regions were less likely to use physical-management strategies, but reported longer struggles with offenders when physical-management strategies were used. These findings may reflect the different policing style used by officers in rural areas and the ready availability of back-up support in metropolitan areas.
- Officers who worked in criminal investigation differed substantially from general duties officers in the types of activities they did. General duties officers were more likely to engage in offender-management activities and other duties related to policing in the broader community, such as administering first aid, moving a dead or injured person, or pushing a car.

5 Discussion and conclusion

This report has provided information about the physical requirements of general duties police officers in the line of duty. Data collection was not restricted to 'typical' physical activities such as running, climbing and managing offenders, but also included the less recognised physical requirements, such as walking for extended periods, or getting in and out of police transport, and less common activities such as administering CPR or moving a large animal carcass.

The findings reported here are particularly relevant to the following areas:

- physical competency/ability tests
- training and education programs
- women in policing
- workplace health and safety.

This final chapter discusses the implications of the findings for each of these areas and concludes by considering possible directions for future research.

Physical competency testing

Physical competency tests or PCTs are used by every State police service in Australia. The stated purpose of these tests is to simulate the physical tasks that a police officer may be required to do in the line of duty. PCTs are not limited to obstacle courses; they can also include shuttle runs,[15] dummy drags, and push–pull tests. PCTs can be used for recruitment and selection and as a form of assessment in recruit-training programs. The following discussion focuses on the use of these tests as selection devices. Issues relating to physical testing as part of PSE programs are canvassed in the next section.

The most common PCT used for recruitment and selection by Australian police services is an obstacle course, although some jurisdictions (e.g. the Northern Territory) use additional PCTs such as the shuttle run. In general, the establishment of cut-off times for test completion are determined by previous recruit performance on the test.

In Queensland, the obstacle course is the only PCT used for selection. Applicants are required to run an outer track of 320 metres, then move to the inner track where they negotiate 13 obstacles over 310 metres, as shown in table 17.[16] As with most obstacle courses, successful completion of the test requires applicants to negotiate each obstacle in no more than three attempts and to complete the entire course within a specified time.

Table 17 — Obstacles used in the Physical Competency Test for the QPS

Obstacle number	Obstacle description
1	Negotiate a two-rung 0.8 m timber rail fence
2	Scale a 1.65 m paling fence
3	Climb a 1.5 m solid wall
4	Climb through two window openings 1 m and 1.6 m above ground level
5	Climb eight steps on the approach side to a 1.78 m wall and jump from this level
6	Crawl through a crawling frame 6 m long and 0.6 m high
7	Climb a 2 m high mesh fence
8	Negotiate a series of eight agility bars to simulate dodging around objects
9	Climb a three-rail pine log fence 1.75 m high
10	Traverse a low balance beam 5.5 m long
11	Run and jump off a concrete ramp 0.43 m high
12	Drag a 50 kg human-shaped dummy for 10 m
13	Climb a 1.4 m paling fence

The use of PCTs, particularly obstacle courses, as a selection technique has been criticised because:

- they lack validity and job-relevance
- are discriminatory
- apply a different standard to applicants than to currently serving officers
- require applicants to demonstrate skills that should not be reasonably expected of a person without police training.

In the United States, there have been several court cases where PCTs have been ruled to discriminate unfairly against applicants (Prenzler 1996). The use of these tests has not yet been the subject of a legal challenge in Australia, but it is probably only a matter of time before this happens.

It has been argued that some tests, particularly obstacle courses, require a competency level that is considerably higher than that demanded of officers in the field. Many of the tests have also been criticised for not realistically representing or simulating what general duties police officers do in the field. For example, it has been queried whether push–pull tests correctly simulate the physical demands placed on a person when managing a noncompliant or resisting offender. Another criticism is that PCTs fail to recognise that in the field officers generally work in teams, can often use items in the environment to assist in negotiating obstacles (such as a garbage bin to climb over a fence or into a window), and may use weapons in managing offenders (Prenzler 1996).

The research reported here lends weight to some of these criticisms, particularly the concerns about the suitability and relevance of obstacle course tests as a means of selecting recruits. Some specific points in this regard are as follows:

- The survey showed that officers were much more likely to have engaged in short bursts of physical activity, such as running to an incident and wrestling with an offender, than to have completed long pursuits. Obstacle courses require applicants to run long distances and negotiate multiple obstacles consecutively. Sixty per cent of police respondents to the survey indicated that in the last 12 months they had engaged in a pursuit that required negotiation of at least one obstacle, but these were infrequent events and it is highly likely that many were of only short duration and involved obstacles that were relatively easy to negotiate, such as a typical suburban fence.
- The survey confirmed that there were a wide range of physical demands placed on police — moving drunk people, running short distances, lifting and carrying objects, crawling under a house, changing a car tyre, moving an animal carcass — but these activities were usually performed less than once a month. It is questionable whether recruits, before the start of a recruit-training program, should be expected to have the ability to do tasks rarely required of currently serving police officers.
- Many of the activities identified by the survey would usually have been performed in isolation, rather than sequentially, which is the focus of the obstacle course.

Consideration of the other objections to PCTs is beyond the scope of this report. However, the findings lend some support to those who argue that a better approach may be to use a general health test, as is now done in many United States jurisdictions (Prenzler 1996). Such a test assumes that applicants to the police service need an average level of fitness and should be free of any illness that could impair their ability to complete the job of a general duties police officer, but does not require completion of a specific set of physical tasks. An advantage of a general health test is that it can also be used beyond the recruit-training program. One of the criticisms continually made of PCTs and PSE programs is that there is no monitoring of the health, fitness, or ability of police officers once they graduate from the recruit-training program.

Training and education programs

The survey findings have several important implications for the training of recruits and serving operational police:

- Managing noncompliant offenders is one of the most frequent — and important — physical demands placed on police officers, and the one most likely to cause the officer injury. Therefore, teaching recruits and serving officers how to deal with these situations effectively should be a high priority. Such training needs to focus not only on the use of physical restraints, but also on how to use communication skills to minimise the need to resort to force when dealing with an offender.
- The value of PSE programs that emphasise endurance fitness and require recruits to complete lengthy obstacle courses within tight time frames is questionable. The survey findings suggest that operational police need to have a reasonable degree of agility and sufficient fitness to sustain short periods of physical exertion. Intensive or strenuous activities are generally done in short bursts (e.g. short pursuit, climb over a fence, struggle with offender). Lengthy pursuits over multiple obstacles, or the need to swim any distance, are relatively uncommon. While it may be desirable that officers have a level of fitness that enables them to swim and run a reasonable distance and successfully tackle multiple obstacles, the amount of PSE program time currently dedicated to these activities should be weighed against the importance of recruits receiving training in other areas, such as offender-restraint techniques and conflict management.
- Similarly, the value of lengthy obstacle courses for PSE assessment is questionable. Tests that simulate short strenuous activities have greater job relevance than obstacle courses. Competence tests simulating the management of noncompliant offenders should take precedence as this is the physical activity that is most frequently required.
- High-speed pursuits (as driver or passenger) are a surprisingly common activity for many police officers. For this reason, it is important that driver training for police officers should emphasise not only driving skills but also the psychological and emotional factors faced by police officers in a pursuit. Police pursuits are a dangerous activity, with a number each year resulting in injury or death, generally to those in the pursued car or to other civilians, as well as damage to property (CJC in press). The ability to remain rational during pursuits may be impeded by the adrenaline rush experienced during high-speed driving coupled with a perceived threat to authority by the police (Kleinig 1996). In particular, officers should be taught how to judge a situation rationally in order to make a justifiable decision about initiating a pursuit in the first instance, as well as to terminate a pursuit in progress as new information comes to hand or the circumstances alter.[17]
- Administering first aid, including CPR and EAR, is an infrequent but important requirement for police officers. Officers who are able to perform these duties are fulfilling their obligation to protect and serve members of the community. CPR and EAR are particularly important skills as they can be used to save a person's life. However, for many jurisdictions in Australia, police officers are not required to maintain their medical training after the recruit-training program.[18] Although firearms' training receives priority in most Australian jurisdictions — both in the form of core training in the recruit program and yearly testing/training thereafter — the same is not true for first aid, CPR and EAR training. While CPR and EAR may not be required often, when officers are called upon to use these techniques, it is crucial that they can do so confidently and effectively — as is well recognised with firearms.

Women in policing

The findings of this research have considerable relevance to the debate over the role of women in policing. Policing has traditionally been not only a male-dominated occupation but one of the most stereotypically masculine occupations — it has been seen as an occupation that requires physical strength and endurance to handle the confrontations faced by officers. The view of women as the 'weaker sex' or less physically capable, especially in upper-body strength, has led to the belief that

women are not as effective as their male counterparts in general duties policing, particularly in situations where there is the potential for physical conflict. Additionally, some police managers still hold the view that female officers create a danger to other officers and to the public when involved in a violent encounter (Bell 1982; Grennan 1987).

Our research does not support the view that women are less able or willing to perform the physical requirements of policing. There were no significant gender differences in how often activities were performed and only four activities where there were differences in the proportion of male and female officers. Most importantly, there were no gender differences relating to the management of offenders, such as moving a noncompliant person, using handcuffs or batons, using pressure-point control tactics and breaking up fights. These findings are consistent with those of an earlier report from New York City, which found that female officers participated in strenuous activities at almost the same rate as male officers (Sichel, Friedman, Quint & Smith in Grennan 1987). Such findings are relevant because females are sometimes perceived as being less involved in, and having less ability to deal with, noncompliant or aggressive offenders.

It is important for police organisations to use recruitment and selection processes that are equitable and based on the inherent requirements of the job. PCTs used by numerous jurisdictions have been shown to exclude women from selection at much higher rates than men (Gaines & Kappeler in Prenzler 1997). Compared to men, Queensland women have significantly higher withdrawal and failure rates on the obstacle course (Prenzler 1997). The results of our study suggest the inherent physical requirements of general duties policing are performed equally by males and females, and therefore do not support the use of PCTs that discriminate against women.

Workplace health and safety

Workplace health and safety is important for all organisations. For policing organisations it is particularly important because of the nature of police work, which can involve activities such as high-speed pursuits and lifting/carrying/dragging people and heavy objects. The impact of injury is a major concern for policing organisations as the costs of absenteeism, compensation, medical treatment, early retirement, and the loss of experience are substantial (Swanton & Walker 1989).

Three areas highlighted in the survey were:

- lifting, dragging and carrying
- risk of exposure to diseases transmitted by saliva or blood
- assault and assault-related injuries.

Lifting, dragging and carrying

The survey showed that police are often called upon to lift, carry, move or drag objects or people. Medical research has shown that lifting excessive weights and using the wrong lifting techniques are significant causes of muscular strains and back injury (Mann 1985). Many such injuries can be avoided by the use of correct lifting techniques. It is important that recruits and serving officers are taught these techniques and encouraged to use them in the field.[19] For example, supervising officers should watch out for dangerous lifting and carrying techniques and correct them.

Exposure to diseases

Another problem identified by the research concerns infectious diseases and their transmission. Respondents in this survey reported exposure to body fluids (blood or saliva) to be the most common ‘assault’ or ‘injury’. The increase in concern regarding exposure to body fluids can, in part, be attributed to greater awareness of the risk of contracting infectious diseases such as Hepatitis or the Human Immune Virus. This change has also been reflected in Workers Health and Safety Forms lodged by Queensland police officers. In 1990–91, there were no injuries reported where body fluids

were the principal weapon or means of inflicting the injury. However, by 1995–96, 15 per cent of reported injuries were caused by body fluids (CJC 1996).

Police need to develop strategies to minimise exposure to body fluids. Examples of such strategies include:

- Teaching officers to identify high-risk factors, such as presence of blood or open wounds, drug intoxication or presence of drug utensils, and use suitable strategies to deal with offenders where the risk of exposure is high. Strategies include maintaining a suitable distance, using conflict-resolution skills such as persuasion, and the use of personal protective equipment such as batons.
- Ensuring officers receive education on all diseases that may be transmitted via body fluids — including the nature of the disease, the probability of infection resulting from exposure, the actions to take after exposure, and action that can be taken if officers contract a disease in the line of duty.

Assault and assault-related injuries

Although the rate of assault and injury does not appear high in absolute terms, it is important to note that in the QPS there has been a 525 per cent increase in the rate of reported assault-related injuries between 1990–91 and 1995–96.[20] In the first six months of 1996, there was an increase of 41 per cent in the number of assault-related injuries reported in 1995, indicating that the number of such reports is still increasing rapidly (CJC 1996). The findings of this survey indicate that assaults and assault-related injuries are common among police. Minimising their occurrence should remain a priority for police managers, because injuries are costly to the organisation and the individual, and because of legislative requirements to provide the safest possible working environment for staff. (Queensland organisations must comply with the *Workplace Health and Safety Act 1995*.) As already suggested above, reduction in assault-related injuries can be achieved by educating officers in strategies to minimise physical contact with offenders, particularly those who are prone to be aggressive or violent.

Directions for future research

The research presented in this report has provided valuable information for the development of police recruitment and selection techniques, training programs, and organisational policy. However, as acknowledged at the outset, some issues could not be properly investigated because of the limitations of the survey methodology and the need to keep the questionnaire as short and simple as possible.

Areas where further research is required include:

- collecting more detailed data about the frequency and intensity with which officers engage in different kinds of physical activity — as indicated, the accuracy of some of the data reported here is questionable because of the likelihood of faulty recall on the part of respondents, especially of high-frequency activities
- ascertaining the extent to which officers perform physical actions alone, as opposed to with the assistance of another officer or the surrounding environment (e.g. standing on a garbage can to get through a window)
- determining how often injuries result from inadequate physical fitness, as opposed to the improper application of techniques, or factors beyond the officer's control
- assessing the extent to which effective communication, interpersonal and decision-making skills can reduce the need for officers to rely on physical-control techniques
- exploring the validity of PCTs and assessing how well specific tests replicate in-the-field requirements.

Examining these issues will, in turn, require the use of a diverse array of research strategies, including observational studies, the keeping of diaries by operational police, analysis of organisational records, and further surveys on the specific physical requirements of police tasks.

Conclusion

This study is one of the first to attempt to quantify the physical requirements of general duties police officers.

Key survey findings include:

- Managing noncompliant offenders is clearly one of the most frequent and critical physical demands placed on police officers. The most likely times for an officer to sustain an injury is before and during the restraint of a noncompliant offender.
- Training needs to ensure that officers have the agility and fitness to sustain short periods of physical exertion, such as wrestling with an offender. However, it is equally important for officers to be taught communication skills that minimise the need for force and reduce assault-related injuries.
- Officers indicated that they were required to perform short bursts of strenuous activity rather than long pursuits on foot with multiple obstacles. This finding raises questions about the validity of obstacle courses, as currently structured, and their suitability for use as a recruitment and selection device.
- High-speed vehicle pursuits were surprisingly common, emphasising the importance of training in this area — not only driver training but training in managing emotional and psychological states during a pursuit. Additionally, officers should be trained in effective decision-making skills to help them make justifiable decisions for commencing and terminating a pursuit.
- All officers should be trained in first aid, particularly CPR and EAR, which are life-saving procedures. While officers may not be called upon to perform these procedures often, it is crucial that when they are required to perform them, they can do so confidently and effectively.
- There were no significant differences between males and females in frequently performed or critical activities, such as managing a noncompliant offender. The view that women are not as effective as their male counterparts in general duties policing was not supported.
- The inherent physical requirements of general duties policing were performed equally by males and females, and therefore the use of PCTs that discriminate against women was not supported.
- Officers reported being often required to drag, lift and carry objects or people. As many strains, sprains and back injuries result from incorrect lifting and carrying techniques, adequate training and in-field supervision should be emphasised to minimise these types of avoidable injuries.
- The most common ‘injury’ or ‘assault’ was blood or saliva contact, which placed officers at risk of exposure to diseases such as hepatitis. Police organisations should ensure they have strategies to minimise the likelihood of exposure to body fluids and that police are well educated and trained in this area.
- Many officers reported assaults and assault-related injuries. Managers in policing organisations need to ensure that strategies are used to reduce the rate of assault and injury.

Endnotes

Chapter 2: Methodology and sample characteristics

[1] A further three sections asked respondents a range of questions designed to assess the PSE component of the PROVE program for the QPS. Because these questions were specific to the QPS training program, the results of the analyses are not included in this report.

[2] Zero responses were excluded because, for items where only a few officers performed the activity, inclusion of zero responses would have grossly underestimated the mean.

Chapter 3: Results — Overview

[3] For this question, respondents were given a range of options as well as an 'other' category. Respondents were instructed to tick only one response. Therefore, responses indicate where the struggle commenced but do not identify across how many situations/locations the struggle took place (e.g. began where offence occurred and continued till offender arrived at watchhouse).

[4] QPS's Operational Procedures Manual (OPM), section 13.11.25.

[5] The QPS does not permit the use of pressure-point control tactics to areas above the shoulders of offenders except when officers are required to protect themselves, in which case, officers may use whatever force is reasonably necessary (OPM, section 13.11.25).

[6] This inconsistency has been rectified by the introduction of a compulsory training course entitled Police Operational Skills and Tactics (POST) in February 1997. The program ensures all officers are trained to the same proficient level in the use of all restraint and defensive tactics including pressure-point control tactics.

[7] At the time of this survey, short rubber batons and long batons were both available on station issue. However, anecdotal evidence suggests long batons were most commonly used. On 4 February 1998, the QPS officially withdrew short rubber batons from use.

[8] OPM, section 13.11.22.

[9] Section 1.7.4 of the OPM states that when an officer initiates a pursuit in an area where radio contact can be maintained, that officer is to ensure that the radio operator is told as soon as possible. In areas covered by the Brisbane Police Communications Centre, the radio operator is to tell the Duty Officer at the Centre who will then be responsible for the control of the pursuit.

[10] There are approximately 1,161 Constables and Senior Constables in the metropolitan regions of the QPS as of 1 November 1997 (source: Workforce Planning and Analysis Unit, Planning and Development, QPS).

[11] Section 1.7.4 of the OPM states that a police pursuit begins when 'an attempt is made to apprehend the driver of a motor vehicle and the driver resists apprehension by maintaining or increasing their speed or by ignoring the police officer's attempt to stop the vehicle'.

[12] Ten months was used instead of 12, to account for recreation leave, training and education, and sick leave.

Chapter 4: Results — Group differences

[13] Comparisons to other areas of policing were not possible because of small group sizes.

[14] The full report on the group differences presented in this chapter is available in a separate document, which may be obtained by contacting the Research Division of the Criminal Justice Commission.

Chapter 5: Discussion and conclusion

[15] Shuttle run tests or multi-stage fitness tests are aerobic capacity tests. The applicant is required to run between two lines, 20 metres apart. The applicant must have one foot either on or over the line when an audible 'beep' is sounded. After each minute, the beeps get closer together so the applicant must run faster. The applicant withdraws from the test when he or she fails to reach the end of the track for two consecutive beeps.

[16] In Queensland, the PCT has been temporarily modified until a full review of its validity is completed. The 1.65 m fence and 1.6 m window have had a step placed in front of them.

[17] For a discussion of other policy issues relating to high-speed pursuits, see CJC in press.

[18] In the QPS, it is now compulsory to complete the Constable Development Program for promotion to Senior Constable. As part of this program, officers are required to have a current First Aid Certificate.

[19] In the QPS, education in lifting techniques is given in recruit-training programs. There is also some training on how to avoid back injury in the POST program.

[20] The earlier increase in reporting behaviour was the result of the proclamation of the *Workplace Health and Safety Act 1989*. The overall increase may, in part, reflect a reporting phenomenon rather than an increase in the number of assault-related injuries.