

# **Trial of Capsicum Spray in Queensland: Evaluation Report**

June 1999



**Criminal Justice Commission**



**Queensland Police Service**

**Mission Statement**

*To promote integrity in the Queensland Public Sector and an effective, fair and accessible criminal justice system.*

**Vision Statement**

*We are determined to be a professional police service, dedicated to excellence and committed to working in partnership with the people of Queensland to enhance the safety and security of our community.*

**Mission Statement**

*To serve the people in Queensland by protecting life and property, preserving peace and safety, preventing crime and upholding law in a manner which has regard for the public good and rights of individuals.*

© Criminal Justice Commission and Queensland Police Service, 1999

Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without permission. Inquiries should be made to the publishers, the Criminal Justice Commission and the Queensland Police Service.

ISBN 0-7242-7144-9

Criminal Justice Commission  
557 Coronation Drive  
Toowong Qld  
Australia 4066

PO Box 137  
Brisbane Albert Street  
Qld Australia 4002

Tel.: (07) 3360 6060  
Fax: (07) 3360 6333  
Email: [mailbox@www.cjc.qld.gov.au](mailto:mailbox@www.cjc.qld.gov.au)

Queensland Police Service  
100 Roma Street  
Brisbane Qld  
Australia 4000

GPO Box 1440  
Brisbane Qld  
Australia 4001

Tel.: (07) 3364 6464  
Fax: (07) 3364 6833

# Contents

<b>Acknowledgments</b>	<b>iv</b>
<b>Abbreviations</b>	<b>iv</b>
<b>Executive summary</b>	<b>v</b>
<b>Chapter 1: Background</b>	<b>1</b>
Use-of-force options	1
What is capsicum spray?	1
Effects of OC spray	2
Use of OC spray by police in Australia	2
<b>Chapter 2: Trial of OC spray in Queensland</b>	<b>4</b>
Project Lighthouse recommendation	4
Purpose of the trial	4
Legal and ethical considerations	4
<b>Chapter 3: Implementation of the trial</b>	<b>8</b>
Duration and location	8
Policy	8
Training	9
Accountability mechanisms	10
Other implementation issues	11
<b>Chapter 4: Evaluation of the trial</b>	<b>13</b>
Evaluation questions	13
Data sources	13
Limitations of the evaluation methodology	14
<b>Chapter 5: Results</b>	<b>15</b>
Number of OC spray incidents	15
Officer characteristics	15
Subject characteristics	17
Incident characteristics	17
Outcomes of uses	19
Uses against dogs	20
Non-compliance with policy	21
Accountability mechanisms	21
Complaints	22
Training	23
Product performance	24
General observations	25
Case studies	27
<b>Chapter 6: Conclusions and recommendations</b>	<b>30</b>
<b>References</b>	<b>32</b>
<b>Appendices</b>	
Appendix A: Terms of reference	
Appendix B: Use of Force Incident Report form	
Appendix C: Checklist for supervisor review	
Appendix D: Product specifications	
Appendix E: Survey questionnaire	
Appendix F: Data tables	

# Acknowledgments

The CJC and the QPS acknowledge the valuable contribution of the Steering Committee, in particular the following regular members: Inspector Andy Henderson, Inspector Glenn Horton, Detective Inspector Dale Weightman, Senior Sergeant Bill Turner and Mr Bill Finlay of the QPS, and Messrs Ian Robinson, Jim Killen and Mark Pathe of the CJC. The Research and Evaluation Unit, Ethical Standards Command, QPS, provided assistance with the email survey.

Mark Pathe of the Research and Prevention Division, CJC, and Inspector Glenn Horton of Project Lighthouse, QPS, were primarily responsible for writing this report. Fofoa Ryan-Southward prepared the document for publication.

## Abbreviations

AMAQ	Australian Medical Association (Queensland)
ASR	Aerosol Subject Restraint
CJC	Criminal Justice Commission
CRISP	Crime Reporting Information System for Police
National Guidelines	<i>National Minimum Guidelines for Incident Management, Conflict and Use of Force</i> (Australian Centre for Police Research)
NPRU	National Police Research Unit (now renamed 'Australian Centre for Police Research')
OC	oleoresin capsicum spray
POST	Police Operational Skills and Training Unit, QPS
QPS	Queensland Police Service
RACAP	Reduction of Assault Complaints Against Police
SERT	Special Emergency Response Team

# Executive summary

The Queensland Police Service recently conducted a trial issue of defensive spray to operational police in two police regions. This report describes the implementation and evaluation of the trial, and makes recommendations for the future use of defensive spray.

## Purpose of the trial

The issuing to police of defensive spray — specifically, oleoresin capsicum or OC spray — was a recommendation of the QPS Project Lighthouse report (1996) and follows similar moves by interstate police services. OC spray is intended to give police an additional tool for use in resolving threatening, dangerous incidents; it is not meant to replace any other ‘use of force’ option currently available to police. As with other options, situational factors will have a bearing on a police officer’s decision to use OC and OC will not always be the best response to violence directed at police.

The benefits of having OC spray available to police were expected to be as follows: fewer or less serious injuries to citizens and police officers, deterrence of violent behaviour by citizens during incidents and fewer complaints of assault or use of excessive force by police.

A joint Queensland Police Service–Criminal Justice Commission Steering Committee was appointed in October 1997 to:

- implement the trial
- evaluate the trial, including the OC spray product
- make recommendations as to the future use of OC by the QPS.

The Steering Committee decided to trial OC spray in the QPS District of Logan in the South-Eastern Region and the Divisions of Brisbane City and Fortitude Valley in the Metropolitan North Region. The trial was conducted in two six-monthly phases. The first phase involved only operational supervisors (Sergeant rank) and the second included all other operational officers (Constable and Senior Constable ranks).

All reported uses of OC spray during the trial, whether within the trial area or not, were examined, with the exception of uses by QPS specialist units. The evaluation considered a wide range of information, including the pertinent characteristics of every incident, police officer and subject. An important limitation of the evaluation methodology was the reliance on police reports.

The Steering Committee set the following criteria by which to judge the results of the trial:

- the effectiveness of the spray
- whether the spray was used appropriately
- the number of injuries/deaths caused or avoided by use of the spray
- the impact on complaints against police.

## Findings and discussion

During the trial there were 35 incidents involving OC spray, all but one occurring in the second six-month phase. Seven of the incidents involved uses against attacking

dogs. Of the 28 incidents involving uses against people, there were 37 deployments (discharges) of OC by an officer against a subject and three recorded uses where there was no deployment — that is, the spray was presented to the subject but not discharged.

Twenty-one of the 28 incidents involving uses against people involved officers from Logan District. The Steering Committee identified several possible reasons for this, including a perception of police that OC is often unsuitable for the circumstances of incidents in the City and Valley Divisions.

Police reports indicated that OC spray had a very disabling impact on 25 subjects, but a lesser impact on 12 of the subjects. Limited incapacitation was usually linked to very aggressive behaviour and/or intoxication or drug use by the subject. OC was found to be consistently effective against threatening dogs.

The OC product selected for the trial was the same as or similar to that used by interstate police services. This type of product was assessed as being generally superior to available alternatives, although a number of shortcomings were found, most of which are common to all such sprays. The shortcomings were confirmed by officers who used OC. Nevertheless, the performance of the product during the trial was at least adequate.

There were few injuries to any person as a result of police intervention. Twenty-eight of the subjects reportedly received no injury, either before or during the incident. Police reported that four subjects were injured during contact with police, with eight subjects injured beforehand. Many of this latter group were suicide/self-harm attempts; use of OC resolved these incidents without further injury to the subjects. Four police officers received an injury, mostly abrasions and bruising, with one officer receiving a broken wrist.

Police reported that, but for the use of OC, they probably would have used another use-of-force option, such as a baton, open/closed hand tactics, or firearm, which presumably would have resulted in a higher injury rate.

On the question of whether OC was an effective deterrent to violence directed at police, the Steering Committee observed that the threat of OC use appeared in many cases to have little deterrent effect. However, many officers reported that they believed that, as more offenders became aware of OC spray, OC became a more effective deterrent. It was also clear that OC spray deployment typically stopped further violence against police in specific incidents by effectively disabling most subjects. On the basis of the above information, the Steering Committee concluded that OC use appeared to have prevented injuries and deaths.

The Steering Committee considered that OC use should always be:

- authorised
- properly intended
- proportionate to the level of threat
- the least harmful option in the circumstances.

The majority of incidents reported met these criteria. The Committee found that, generally, OC spray appeared to be used responsibly and appropriately by police. However, in the absence of further evidence, it was difficult to make exacting judgments on every incident.

The most problematic uses of the spray occurred when a subject was already in police custody (such as restrained in handcuffs and/or placed in a police vehicle). Four incidents involved the subjects being sprayed while in custody in a police vehicle. One of these

incidents resulted in a complaint. Three incidents occurred at a police station; no complaints arose from these incidents. There were no uses of OC in a police watchhouse.

There were five complaints lodged with the Criminal Justice Commission or the Queensland Police Service about the use of OC during the trial. One of these was not related to a reported incident but a threatened use. Three of the complaint cases had been finalised by the time of reporting, with no adverse findings against police.

Complaints of misconduct relating to allegations of assault or use of excessive force by officers from the trial areas fell slightly in Logan District, but increased in City and Valley Divisions. (City and Valley Divisions had much lower rates of OC use than Logan District.)

On a small number of occasions police reported that they did not comply with some aspect of the draft QPS policy and procedures on OC spray. The Steering Committee examined each instance and determined that the actions of police were justifiable.

## Conclusion

The overall conclusion of the Steering Committee was that the aims of the trial were generally met. There were no serious problems with the use of OC spray during the trial. There were strong indications that OC spray would prove a very useful addition to the current range of incident-resolution options available to Queensland police.

## Recommendations

1. That the issue of OC spray to operational police be implemented on a statewide basis as soon as practicable.
2. That the statewide implementation of OC spray be overviewed by a joint Queensland Police Service–Criminal Justice Commission Steering Committee, which should report to the Commissioner of Police and the Chairperson of the CJC. The Steering Committee should make recommendations on policy, training, accountability mechanisms, stock management and other relevant issues.
3. That an extensive process of community consultation be undertaken during the implementation of OC spray (including publication of this report, media releases and briefings to community organisations and relevant authorities such as health services), with particular attention to the introduction of OC spray within Indigenous communities.
4. That an evaluation of the impact of OC use by police be carried out by the Queensland Police Service Ethical Standards Command, in liaison with the Steering Committee, to be completed following 12 months of statewide operation. The evaluation should examine, for example, the level of violence against police, injury rates and complaints against police.

# Chapter 1: Background

The Queensland Police Service (QPS) recently conducted a trial issue of capsicum spray to operational police in two police regions. This report describes the implementation and evaluation of the trial, and makes recommendations about the future use of defensive spray by Queensland police.

## Use-of-force options

The need for additional ‘less than lethal’ force options for police to use in resolving violent incidents has become widely recognised. The United Nations has called for the development and deployment of such options, as the following extract from its *Basic Principles on the Use of Force and Firearms by Law Enforcement Officials* (1992) states:

Governments and law enforcement agencies should develop a range of means as broad as possible and equip law enforcement officials with various types of weapons and ammunition that would allow for a differentiated use of force and firearms. These should include the development of non-lethal incapacitating weapons for use in appropriate situations, with a view to increasingly restraining the application of means capable of causing death or injury to persons. (From General Provisions [2])

Defensive spray is a generic term for a number of different products that cause pain and irritation when sprayed on a subject.<sup>1</sup> Such products have been found to be effective self-defence weapons for police. Ideally, use of defensive spray allows police officers to subdue or deter violent and resisting people or threatening animals from a relatively safe distance, thus limiting the risk of injury to police and others.

The Australian Centre for Police Research<sup>2</sup> has examined incident resolution methods available to police, including defensive sprays. Its *National Minimum Guidelines for Incident Management, Conflict and Use of Force* (the ‘National Guidelines’), published in 1998, recommended appropriate incident resolution options for Australian police services. The National Guidelines state: ‘Capsicum spray is the additional less than lethal tool recommended for adoption ...’.

## What is capsicum spray?

Capsicum spray, which will be referred to as ‘OC spray’ (for oleoresin capsicum) in this report, is also known as pepper spray.<sup>3</sup> OC spray is manufactured from hot (cayenne) peppers from the capsicum family of plants.<sup>4</sup> As OC is derived directly from plant material, it is not a synthetic chemical agent, unlike other types of spray. For general police work, an advantage of OC compared to other sprays is that it dissipates quite readily, making decontamination a relatively simple task. The National Guidelines state: ‘CS and CN (tear gas) are not recommended for adoption by general operational police and investigatory police’.<sup>5</sup>

---

1 Defensive sprays are also referred to by law enforcement agencies as ‘aerosol subject restraints’ or ASRs.

2 Formerly called ‘National Police Research Unit’ (NPRU).

3 Some police officers refer to OC as ‘CS’, for capsicum spray, which should not be mistaken as reference to CS, a type of ‘tear gas’ (o-chlorobenzylidene malononitrile).

4 For a more detailed description of OC spray characteristics, see NPRU 1998.

5 CS is o-chlorobenzylidene malononitrile; CN is chloroacetaphenone. For an explanation of the disadvantages of CS and CN, see Kaminski et al. 1999.

## Effects of OC spray

When deployed against a person, OC spray typically has a severe impact, causing in most people an intense burning sensation, temporary blindness and gasping for breath.<sup>6</sup> This effect is acute for several minutes and remains debilitating for up to an hour, after which people recover from all but minor burning sensation on areas exposed to OC. This sensation fades within hours. OC spray typically causes aggressive dogs to lose interest in their intended victim and retreat from the scene.<sup>7</sup>

It is important to note that the effect of OC may range in severity, with a small proportion of people suffering only minimal symptoms. The effect on people suffering a mental disorder or severely affected by alcohol or drugs can be diminished (NPRU 1998).<sup>8</sup> In addition, the effect of OC spray is not necessarily instantaneous. Some people can defy the effects for some time, especially if they are highly motivated or strongly task-focused (Truncale & Messina 1994). A further potential shortcoming of OC is the limited spray range of two to three metres (the actual range depends on the product, with range and accuracy also affected by wind and weather conditions). This range may be inside a 'safe distance' for police, depending on situational factors such as the characteristics of offenders and the type of weapon he or she has.

Like other defensive sprays, people can suffer 'secondary exposure' to OC if they come into contact with spray residue or breathe in airborne particles. The impact of secondary exposure, though typically less severe or long-lasting than primary exposure, can be quite debilitating.

In contrast to the physical injury that other use-of-force options can inflict, the effect of OC spray is temporary; it causes pain, not injury, although some critics of OC spray may disagree with this assessment (see 'Legal and ethical considerations', page 4).

The use of OC spray by law enforcement agencies in other countries has increased since the 1970s. OC spray has been tested and trialled by several law enforcement agencies, mainly in the USA, which have found it to be 'effective' in the large majority of deployments and successful in reducing injury and citizen complaints of assault by police (e.g. DuBay 1995, Lumb & Friday 1997, Morabito & Doerner 1997, Edwards et al. 1997).<sup>9</sup> Preliminary results from other research have shown the value of OC as a deterrent to violence directed at police (Kaminski et al. 1998). Since the late 1980s, literally hundreds of law enforcement agencies in North America have adopted OC for use as a non-lethal weapon (IACP 1995), particularly since research by the FBI's Forensic Science Research and Training Centre and the US Chemical Research and Development Centre could find no evidence that any long-term health risks were associated with OC use (Weaver & Jett 1989).

## Use of OC spray by police in Australia

The Victoria Police were the first in Australia to adopt OC spray for general operational use, following a ten-year period from 1984 to 1994 in which there were 30 fatal shootings of suspects by police.<sup>10</sup>

---

6 For a more detailed description of the impact of OC spray, see NPRU 1998.

7 However, Nowicki (1994) has warned that attack-trained dogs are able to tolerate OC.

8 In contrast, research by Morabito & Doerner (1997) found that OC worked equally well on mentally disturbed subjects, intoxicated subjects and physically stressed subjects.

9 The studies have differing criteria for, and measures of, 'effectiveness' of OC spray; e.g. some focus on incapacitation of subjects, others on arrest of subjects.

10 *The Age* 3 July 1997.

In response to this trend, the Victoria Police established 'Project Beacon' in 1994, which recommended that OC be issued to all operational police officers (Victoria Police 1996). The Victoria Police undertook extensive research into OC, then conducted a trial of the spray at eight police stations in 1996, before moving to full implementation in 1997. The Victoria Police trial found that OC spray was effective in defusing volatile situations with a reduced number of injuries to both subjects and police.<sup>11</sup>

Although fatal shootings by police led to a review of the use of force and the adoption of OC spray, the spray did not replace firearms as a use-of-force option in Victoria. This followed the pattern of the USA, where the expansion of less-than-lethal force options available to police did not supplant firearms in the police armoury. The impact of this trend on 'homicides by police' was examined in US research by Bailey (1996), who concluded that the 'analyses do not support the hypothesis that the availability of less-than-lethal weapons reduces rates of justifiable homicides ... To the contrary, the findings show ... negligible results'.

Police services in South Australia, Tasmania, Queensland, the Northern Territory and New South Wales have all since implemented OC spray, either fully or on a trial basis. The Western Australia Police Service initially decided not to use OC spray, because it was not convinced of the spray's effectiveness in subduing offenders and was concerned at its growing use by criminals (see 'Criminal use of OC', page 7).<sup>12</sup> More recently, the WA Police Service decided to conduct a limited trial of OC spray.<sup>13</sup>

---

11 There were 43 uses by police in the Victorian trial. (*The Age* 3 July 1997)

12 There were reported to have been 30 offences in Western Australia involving OC spray in a nine-month period in 1997-98. (*The West Australian* 5 March 1998)

13 *The West Australian* 8 June 1998.

## Chapter 2: Trial of OC spray in Queensland

### Project Lighthouse recommendation

The 1996 QPS Project Lighthouse report (which reported on a major review of operational safety and the use of force by police) included a recommendation that OC spray become a standard accoutrement for all operational officers, to be phased in during 1999.

The fatal shooting of a man at Bondi Beach in New South Wales in mid-1997 highlighted the issue of ‘non-lethal’ use-of-force options. In Queensland, the then Minister for Police and Corrective Services assented to OC spray being used by Queensland police, endorsing a QPS proposal for a trial introduction period with a follow-up evaluation. (Before the trial, there had been a small number of uses of defensive spray by police specialist units to resolve dangerous situations such as sieges.)

### Purpose of the trial

A joint QPS and CJC Steering Committee was formed to overview the trial. The Steering Committee’s terms of reference were to implement the trial, evaluate the trial and the spray product, and make recommendations as to the future use of OC by the QPS. The Steering Committee was to report its findings to the Commissioner of Police and to the Chairperson of the CJC. (See appendix A for the Steering Committee’s terms of reference, including committee membership.) QPS Project Lighthouse staff had primary responsibility for managing the trial, with staff of the Police Operational Skills and Training (POST) Unit at the QPS Academy responsible for training and related matters.

The introduction of OC defensive spray was intended to add a ‘less-than-lethal’ and ‘non-injurious’ option to the range of incident resolution (use-of-force) options available to police officers, and result in improved resolution of some violent police–citizen encounters. The expected benefits of having OC spray available to police included: fewer or less serious injuries to citizens and police officers, deterrence of violent behaviour by citizens during incidents and fewer complaints of assault or use of excessive force by police.

OC spray is a weapon with a severe, if short-term, impact. Therefore, it was expected that police use of OC should always be responsible and justifiable. Police should be accountable for their actions and exercise a duty of care to people affected by spray.

### Legal and ethical considerations

As OC spray has a major physical impact on people, there is a danger that it may be used inappropriately. One Australian civil liberties group has claimed that OC spray is an ‘extra weapon in the police arsenal’ which police ‘have demonstrated they can’t use responsibly.’<sup>14</sup> For example, some US police services have used irritant sprays for crowd dispersal against people passively resisting police directions at demonstrations. There have also been allegations that some US police have used OC as a punishment (Bobb et al. 1996). In addition, there is research evidence which shows that police ‘use of force increased with the introduction of OC’ (Lumb & Friday 1997).

---

<sup>14</sup> *The Age* 3 July 1997.

## The legal basis for using OC spray

The use of OC spray must be justifiable. Kleinig (1996) provides a useful discussion of legal and ethical ‘tests’ of the use of force that may be applied by police.

Police must firstly be authorised to use force. This represents a ‘very significant ceding of power’ by citizens, so constraints on this authority are provided to a significant extent by the law and the courts (Kleinig 1996). According to Kleinig, the US judiciary employs two types of test to determine whether the use of force by police is justified. The subjective ‘good faith test’ seeks to determine whether the officer applied force either in good faith, to maintain order, or maliciously, to cause harm. The objective ‘excessive force test’ seeks to determine whether, given the circumstances, the force used was excessive or unreasonable.

In Queensland, OC spray is a weapon (under category ‘R’ of the Weapons Categories Regulations 1997), and its use is regulated by the *Weapons Act 1990*, which makes it an offence to possess or use a weapon without a licence or without lawful authority, justification or excuse (section 50).<sup>15</sup> However, police officers (and trainee police officers) are exempted from the operation of the Act in respect of their possession and use of weapons ‘as part of the performance of duty as such’ (section 2[1][e]).<sup>16</sup>

In the Queensland *Criminal Code*, the act of assault includes the application of gas or any other substance to a degree that causes injury or personal discomfort (section 245).<sup>17</sup> However, section 246 provides that the offence of assault is not committed where the act is authorised, justified or excused by law. Reasonably necessary force may lawfully be exercised by a police officer in overcoming resistance to arrest (section 254), in self-defence (sections 271 & 272), to prevent a breach of the peace (section 260) or to suppress a riot (section 261). Excessive force — that is, more force than is justified by law under the circumstances — is unlawful (section 283).

Police use of weapons is controlled by means of the Commissioner’s directions made under section 4.9 of the *Police Service Administration Act 1990* and set out in the QPS Operational Procedures Manual (Chapter 14). Failure to follow the Commissioner’s directions constitutes a breach of discipline under section 7.4 of the *Police Service Administration Act 1990* and Regulation 9 of the Police Service (Discipline) Regulations 1990.

In summary, Queensland law allows the Commissioner of Police to authorise police to use a class of weapon, such as OC spray, and the law in effect applies an ‘excessive force test’ to its use.

## Ethical factors

Kleinig, however, suggests that there is a broader ethical dimension to this issue than that addressed by the law. He nominates five subjective ‘constraining factors’ as relevant to an ethical assessment of the use of force by police:

- intentions: force should not be used for punishment
- seemliness: the use of force should be a seemly, or decent, act

15 OCS canisters could fall within that definition in either of two ways, either as a firearm or as a Schedule 1 item. Schedule 1 includes anti-personnel gases and substances of a corrosive, noxious or irritant nature that are capable of causing bodily harm.

16 The Commissioner of Police may also grant exemptions from application of provisions of the Act [s. 2(1)(e)]. This may occur, for example, where an off-duty police officer retains possession of his or her weapons.

17 The *Criminal Code* contains other offences relating to administration of noxious substances (including ss. 317, 322 & 323). In most cases those offences specify that the act must be committed ‘unlawfully’. The use by police of ‘reasonably necessary’ force as outlined above would be lawful.

- proportionality: the force applied should not be disproportionate to the seriousness of the offence
- minimisation: this refers to the principle of ‘least restrictive alternative’; the police should employ means that are the least harmful, yet compatible with securing their legitimate ends
- practicability: police should discriminate between when a ‘forceful’ presence is necessary and when a less adversarial approach should be used.

The matter of justifiable use of OC spray was given close attention during the Queensland trial and was taken into account in the development of policy, training and accountability mechanisms (see chapter 3).

### Health of people exposed to OC

A major concern of both critics and supporters of OC spray is the potential for it to inflict more permanent physical harm. Asthmatics, in particular, may have their health put at risk, as could people with a range of other ailments such as heart conditions. The use of OC spray has been linked to several deaths of police prisoners in the US, a charge often made by critics of police use of OC spray.

In response to concerns about defensive spray causing deaths of people in police custody, the International Association of Chiefs of Police conducted a study of 30 deaths in the USA which had all followed OC use (IACP 1995 and NPRU 1998). The cause of death could not be attributed to OC in any of the 23 cases where there was sufficient information to form a conclusion. The deaths were caused by the effects of drug overdoses and/or ‘positional asphyxia’, aggravated by drugs, disease and/or obesity.<sup>18</sup>

Ranson (1994) examined the medical research relevant to OC spray and warned that there were ‘almost certainly some high risk individuals who could suffer more serious consequences from the use of capsicum sprays ...’ However, supporters of OC may argue that ‘the issue is one of reasonable safety not perfect safety’ (Bunting 1993 in NPRU 1998).

The Victoria Police and the NPRU obtained the advice of an expert in respiratory medicine, who collated research undertaken worldwide and concluded that ‘the risk of an acute severe (asthmatic) episode is considered very low’ (NPRU 1998). He recommended, however, that police should monitor subjects appropriately (for an hour) to detect any such occurrence.<sup>19</sup> The NPRU also recommended that ‘careful consideration should be given to whether a bronchodilator ... should be issued to patrol personnel for use in the after-care of the suspect’ (1998).

Questions have also been raised about potential carcinogenic properties of defensive sprays. OC spray is not *known* to be carcinogenic. In addition to noting the US research cited above (Weaver & Jett 1989), the NPRU obtained an expert assessment of UK research, which concluded that both the experimental research and epidemiological studies suggested that capsaicin (the active ingredient of OC) did not increase the risk of cancer (NPRU 1998). The NPRU also noted, however, that research by the UK Home Office raised concerns sufficient for the Home Office to recommend that OC not be introduced by British police services (NPRU 1998).

Concerns that OC spray use could possibly result in serious consequences for people’s health were recognised during the development of the Queensland trial (see chapter 3).

---

<sup>18</sup> ‘Positional asphyxia’ refers to asphyxiation caused by the body position of the subject: in these cases this typically meant the subject was lying face down on the stomach, usually with hands and feet restrained behind the back (referred to as ‘hog-tied’).

<sup>19</sup> Correspondence received from the Victoria Police, August 1997.

## Criminal use of OC

A further concern is the potential for criminal or illegal use of defensive sprays. It could be argued that once police have access to sprays, criminals would also arm themselves with these weapons.

As previously noted, it is an offence to possess or use OC without proper authority or reasonable justification. Illegal use or possession of OC in Queensland in recent years has been growing steadily, with a marked increase in 1998 (see table 1). Although the recent increase coincides approximately with the trial period, not one of the uses was against police. Nevertheless, the increased incidence is cause for some concern.<sup>20</sup>

Importation of OC spray into Australia is not currently restricted by law. However, the Australasian Police Ministers' Council in late 1998 resolved to support the prohibition of import of 'self-protecting disabling substances' (which include OC spray), except for official police and custodial use, and to support the prohibition in Australia of the unauthorised manufacture, distribution, possession or use of OC spray and similar products (MCAJ 1998).

**Table 1: Recorded offences — illegal use or possession of OC spray  
(Qld, 1994–98)**

Year	Use	Possession
1994	0	1
1995	2	1
1996	5	7
1997	6	3
1998	8	20

Source: QPS CRISP system (unpublished preliminary data).

<sup>20</sup> Examination of these cases showed a tendency for people charged with use and/or possession of OC spray to also be charged with firearms and drug offences.

## Chapter 3: Implementation of the trial

### Duration and location

The Steering Committee decided to trial OC spray in South-East Queensland areas with the highest incidence of assault and assault-of-police offences. The areas chosen were the QPS District of Logan in the South-Eastern Region and the Divisions of Brisbane City and Fortitude Valley in the Metropolitan North Region.<sup>21</sup>

The trial was conducted in two phases. The first phase involved only operational supervisors (Sergeant rank) and the second included all other operational officers (Constable and Senior Constable ranks). The phased approach was intended to allow possible shortcomings to be revealed and rectified as early as possible. It also allowed time to overcome limitations of training resources and supply of product. The duration of each phase was approximately six months. Phase 1 of the trial commenced on 23 March 1998. Training of officers for Phase 2 took place during September and October 1998. Phase 2 concluded on 23 March 1999.<sup>22</sup>

### Policy

According to the ‘situational use of force model’ adopted by the QPS on the recommendation of the Project Lighthouse report (QPS 1996), the choice of force option depends on the situation in which it may be applied. Each officer must decide the most appropriate choice, taking into account the factors relevant to each incident. The choice of option may change during the same incident, as events unfold. Current options include the physical presence of the officer, dialogue, body force (such as neck restraints and open or closed hand techniques), impact weapons (such as batons) and lethal force (firearm). OC spray was considered by the QPS to be an additional use-of-force option, not a replacement for any current option in defined situations.

In developing (for the trial) the draft policy on use of OC spray, Steering Committee members examined policies and other documentation from interstate and overseas police services. A key consideration was the question of ‘appropriateness’: when should OC be used and when should it not be used? Further, how could this be adequately defined in the draft policy and supporting documentation to provide effective guidance for police officers who may face a wide range of threatening situations in their work?

For this key section of the draft policy, the Steering Committee ultimately drew upon an extract from the policy of the New Zealand police. (The NZ Police policy for regulating OC use was subsequently endorsed by the NPRU [1998]).<sup>23</sup>

The draft QPS policy states that officers should consider all the circumstances of an incident and the options available to them when determining the most appropriate use-of-force option(s) to be used. Defensive spray may be appropriate to use when police need to:

- defend themselves or others if they fear physical injury to themselves or others and they cannot reasonably protect themselves or others less forcefully

---

21 Another important consideration in the selection of trial areas was the capacity of the QPS Academy to provide training for the number of police officers within the trial areas.

22 There was only one use of OC by a supervisory officer during Phase 1 of the trial. As a result, the Steering Committee considered bringing Phase 2 forward, but was unable to do so because of resource and logistical constraints.

23 This key extract from the NZ policy statement is very similar to that of the Victoria Police.

- arrest an offender if they believe on reasonable grounds that the offender poses a threat of physical injury and the arrest cannot be effected less forcefully
- resolve an incident where a person is acting in a manner likely to seriously injure him/herself and the incident cannot be resolved less forcefully
- deter attacking animals.

The following was specifically prohibited: 'OC defensive spray should not be used against persons offering passive resistance.' A later version of the policy added: 'Officers should not use OC spray in crowd control situations.'

The draft policy also incorporated several other significant components intended to safeguard against unauthorised or inappropriate use, to promote the safety of police and public and to ensure accountability of police. These included a requirement that officers who carry OC:

- be adequately trained
- give a spoken warning prior to using OC
- exercise a duty of care by providing decontamination and other assistance to people sprayed
- report each instance of OC use (including threatened deployment).

It was also specified that each instance of use be reviewed at a higher level. The draft policy (as at March 1998) was included in the draft Good Practice Guide (see 'Training', below), which was provided to each trainee.

## Training

The training course and documentation were developed by the QPS Academy POST Unit, based broadly on a 'best practice' approach. POST and Project Lighthouse staff participated in training with the South Australia Police and obtained training material from interstate police services to assist the development process. All the material was assessed and a draft Good Practice Guide was developed to provide relevant information on OC for trainees. The Guide was issued to all course participants for use during the course and to retain as a reference after completion of the course.

The training course included emphasis on:

- the effects and limitations of OC, noting that OC is an additional force option and is not suitable for all circumstances
- the responsible use of OC and the factors officers should consider prior to its deployment, including the QPS 'Situational Use of Force model' and the relevant aspects of the draft policy
- the need for comprehensive 'after-care' for the sprayed subject

After-care consists of a range of actions designed to reduce the effect of OC on the subject and to hasten the decontamination period. The most effective form of decontamination involves irrigation of the affected body areas, particularly the eyes, with water and soap to wash off OC residue. After-care also involves direct observation (for an hour) and reassurance of the subject (explaining to the subject that he/she would recover and how best to achieve this). QPS after-care procedures meet the National Guidelines.
- giving participants personal experience of the effects of OC spray by indirect, or secondary, exposure; some volunteers also received direct exposure which allowed participants to practise after-care procedures.

The draft Guide and the details of the proposed training course were endorsed by the Steering Committee.

Officers at Sergeant rank were trained in March 1998 and lower ranked officers were trained in September and October 1998. The total number of people trained during the trial was 492, comprising: Logan District: 247, City Division: 136, Valley Division: 81, others including training staff: 28. Some Steering Committee members participated in the training course to experience it first-hand and provide comments to POST Unit staff.

## Accountability mechanisms

### Incident reporting

To monitor the use of OC during the trial, a ‘Situational Use of Force Incident Report’ form was designed for completion by every officer who used OC. Completed forms were to be submitted to Project Lighthouse. This form included a number of variables of interest to the evaluation, including other types of force used (specifically, batons or firearms) in conjunction with OC. The form was amended during the trial to gather additional information on the circumstances of OC use.<sup>24</sup> The form was similar to that used by the Victoria Police Service to record instances of use of force, both against and by Victoria police. (See appendix B for a copy of the form.)

A ‘use’ of spray, as defined in the draft policy, included both deployment (an actual discharge of spray against a person or animal) and presentation of the spray to a subject as if to spray (without discharge).<sup>25</sup> In any incident involving OC spray there may be more than one use; in other words, there may be more than one subject sprayed and by more than one officer.

Officers were required to report:

- instances where they withdrew the OC canister from its pouch and presented it for use
- actual deployments of the OC spray during an incident
- the breaking of the ‘integrity seal’ on the canister (see ‘Product specifications’, p. 12).

### Supervisor and Steering Committee Review

The draft OC policy also dictated that the incident reports, in addition to being used to record use of OC at each station, were subject to local supervisor review immediately after each incident. A copy of each report was then to be sent to the Steering Committee for collation and analysis. A checklist was prepared by the Steering Committee to assist local supervisors to review incidents (see appendix C). The checklist was also intended to provide the basis for a more detailed review report, should one be required.

### Product integrity safeguards

Several ‘integrity safeguards’ can be specified for OC canisters (see ‘Other implementation issues’, page 11).

---

<sup>24</sup> Unfortunately, copies of the original form were not replaced with the revised form at all police stations and several incidents were reported on the original form.

<sup>25</sup> ‘Use’ excludes accidental discharges not aimed at any subject.

## Station versus personal issue

Each batch or supply of canisters was provided to police establishments in the trial area as 'station issue' equipment. Officers were required to be personally issued with a canister of OC at the start of a shift, with both the supervisor and officer inspecting the integrity of the canister, and to return the OC at the conclusion of duty, when the canister was again inspected for use. Canisters were not issued on a 'personal basis'; officers did not retain them between shifts.

## OC issue audits

To further test the accountability of OC stock management, two audits were conducted, in November 1998 and March 1999. The results of the audits are outlined in chapter 5.

## Other implementation issues

### Health issues

The Steering Committee decided that, for the trial, police would not be required to carry bronchodilators for use in the after-care of sprayed subjects who were asthmatics (see NPRU recommendation referred to on page 6), for the following reasons:

- it was likely that bronchodilators would be required only rarely
- it was assumed that many asthmatics carry their own bronchodilators
- managing and replacing products with a short shelf life would be difficult and expensive for the expected limited use.

Project Lighthouse members visited the ambulance services and all hospitals in the trial areas to inform ambulance and hospital staff about the trial, describe the effects of OC, outline treatment and decontamination procedures and provide medical and technical information.<sup>26</sup>

Project Lighthouse members also visited the College of Emergency Medicine and wrote to the Queensland branch of the Australian Medical Association (AMAQ) to raise concerns about the potential adverse impact of OC on people's health. AMAQ sought advice from specialists in several medical fields, and their advice broadly confirmed the assessments of relevant research noted by the NPRU (see chapter 2).<sup>27</sup>

### Use of OC in watchhouses

Another issue considered by the Steering Committee was the potential use of OC in police watchhouses. The main concern in this regard was the possibility that people in the watchhouse could receive secondary exposure from the spray misting throughout the confined space, with a potential need for evacuation. The SA Police conducted a trial of an OC foam product in two watchhouses because of similar concerns.<sup>28</sup> Further, it was also of concern that use of OC on a prisoner detained in a watchhouse could appear to be an 'unseemly', inappropriate action. Despite the concerns raised, the Steering Committee did not seek to prohibit the use of OC in watchhouses during the trial.

---

<sup>26</sup> Queensland Ambulance Service and St John Ambulance.

<sup>27</sup> Correspondence received by QPS, December 1997.

<sup>28</sup> The SA watchhouse trial found OC foam to be an effective option for watchhouse use; however, the result of the SA trial was not available prior to the commencement of the Queensland trial.

## **Use of OC spray in Indigenous communities**

A workshop for Australian police services was held in the Northern Territory in July 1998 to discuss particular concerns regarding OC spray use in Aboriginal and remote communities. Although the QPS was not represented at the workshop, Project Lighthouse staff obtained the submissions and proceedings.

It was clear from some of these submissions that there are a number of issues that must be carefully considered in relation to police carriage of OC spray within Indigenous communities. For example, the SA Police have decided not to allow police officers or Aboriginal police aides to carry OC within the 'traditional Aboriginal areas' of the State for 'unique policing and public health' reasons, despite its proven effectiveness in other remote communities with high Aboriginal populations.<sup>29</sup>

## **Product specifications**

In choosing a suitable product for general operational police use, there were many variables to consider, including OC concentration, type of carrier agent, canister size, nozzle type and delivery method. A suitable product for the trial was identified and endorsed by the Steering Committee, after consideration of the desired specifications (see appendix E) and assurance was received that sufficient product could be supplied.

There are several types of spray-delivery methods available: stream, mist, fog, foam or burst. Each of these has strengths and weaknesses in relation to accuracy and range (NPRU 1998 describes these more fully). For general use, interstate police services favoured the burst type, so called because it delivers a compact cloud of spray (NPRU 1998). After an assessment by the POST Unit of various product configurations, the Steering Committee decided to adopt the burst type for the trial, while recognising the weaknesses identified during assessment (see 'Product performance' on page 24).

The OC canister used during the trial featured a press-tab 'integrity seal' over the push button actuator. Once broken the seal cannot be repaired. The breaking of this seal indicates the spray has either been used or prepared for instant use (through presentation to the subject and finger pressure through the seal). The integrity seal provides two safeguards: (i) on issue of spray canisters, the unbroken seal is evidence to officers that canisters are unused; and (ii) an unbroken seal is evidence to supervisors and reviewing officers that OC spray has not been deployed without being reported.

The OC product used during the trial contained both an observable coloured dye and an ultraviolet (UV) dye. The coloured dye gives police, the subject and external observers direct evidence that contamination with OC has occurred. The UV dye also gives evidence of use, as traces of dye can be seen using a 'black light' for at least 24 hours after use. OC canisters are all serial numbered to facilitate accountability and stock management, including recording of issue.

---

<sup>29</sup> This refers specifically to the areas governed by land rights legislation: the Anangu Pitjantjatjara and Maralinga Tjarutja lands. (ASR Use in Remote Australia Workshop, Alice Springs, July 1998 — received from NT Police.)

## Chapter 4: Evaluation of the trial

### Evaluation questions

Given the intended outcomes of the trial, outlined in chapter 2, it was decided that the evaluation would focus on the following questions:

- Did the spray effectively subdue violent citizens and dangerous dogs?
- Was OC spray a deterrent to violence towards police?
- Were deaths or injuries to citizens and officers caused, minimised or avoided through the use of OC spray?
- Was the draft policy appropriate and effective? Did officers comply with the draft policy?
- Was the training effective?
- Was OC used responsibly and appropriately by police — that is, was OC use always authorised, proportionate to the threat, properly intended and the least harmful option in the circumstances?
- Was there a reduction in the level of complaints by citizens of assault or use of excessive force by police?
- Did officers exercise a duty of care to those affected by spray?
- Did the accountability mechanisms function effectively?

### Data sources

All reported uses of OC spray during the trial, whether within the trial area or not, were examined, with the exception of uses by QPS specialist units.<sup>30</sup> The evaluation considered a wide range of information, including the pertinent characteristics of every incident, police officer and subject.<sup>31</sup>

The main data sources for the evaluation were:

- police ‘self-reports’ via the ‘Use of Force Incident Report’ form (see appendix B)
- a survey by the Steering Committee of all police officers in the trial areas. The survey was transmitted via email and was designed to elicit the opinions of officers about OC spray and their experience with it. There were 824 officers contacted, with 72 respondents as of the cut-off date for returns.<sup>32</sup> Of the 72 respondents 22 had used OC. (See appendix E for the survey questionnaire.)

Additional data sources were:

- review reports
- interviews of police officers

---

30 Uses by the Special Emergency Response Team (SERT) have not been included in this report. SERT may use different products and tactics to those employed during the trial. (It is understood that there were no uses of OC by SERT during the trial period.) However, the Steering Committee liaised with SERT, with the result that SERT members undertook the OC spray training course, particularly to ensure they were familiar with after-care procedures.

31 Information about Aboriginality and ethnicity of subjects was not sought.

32 All staff in the trial areas were surveyed, as targeting only those who had received OC training was too difficult. The response rate was low: only 10% of Logan staff responded, and 8% for each of City and Valley. However, 22 of the 26 officers who had used OC responded.

The purpose was to gather further information in relation to selected OC use incidents, particularly in relation to the adequacy of the draft policy, training and equipment. It was intended that QPS staff nominated by the Steering Committee would interview officers who had used OC at these incidents. However, due mainly to workload priorities of the nominated officers, this procedure happened for the first reported use only and was later displaced by the email survey.

- complaints regarding OC use made to the QPS or the CJC  
The relevant CJC files were examined by CJC representatives on the Steering Committee.
- data on complaints of assault and excessive force by police in the trial areas, received by the QPS or the CJC
- offence history of the people sprayed with OC
- audits conducted by Project Lighthouse
- data from interstate police services on uses of OC.

## Limitations of the evaluation methodology

The main limitation of the evaluation methodology was its reliance on self-reporting by police. It was sometimes difficult for those involved in the evaluation to obtain a full understanding of, or make judgments about, an incident, as they were not present at the incident and so could not be aware of all the situational variables that the police officers present had to consider when deciding the appropriate incident-resolution method/s.

The Use of Force Incident Reports received from officers varied considerably in the amount of information provided about incident circumstances and sequences of events. Many were quite detailed and some also made explicit reference to the decision making of the officers involved. Others were quite brief. In considering whether to attempt to obtain perspectives other than those of police, the Steering Committee had prepared guidelines for use in follow-up interviews of selected subjects, but ultimately decided against that course of action.<sup>33</sup>

Other limitations of the methodology:

- The email survey of police in the trial area had a low response rate, so may not be fully representative of officers' views.
- The QPS injury reporting system could not provide adequate data on officers' injuries.
- There were no 'baseline' data on the use of force by police or on resulting injury to citizens.<sup>34</sup>
- The time frame and the geographic area of the trial were, by necessity, restricted. This reduced the trial's capacity to have an observable impact on the rates of injury to police officers or complaints of assault by police.

---

33 There were several factors influencing this decision, including limited time, the likelihood of suspect recall of events by subjects who had often been affected by drugs/alcohol and concerns about the implications of having officers from either the CJC or the QPS approach a subject.

34 The QPS and CJC have conducted research on ways to reduce complaints of assault made against police (this project was known as the Joint Working Group for the Reduction of Assault Complaints Against Police [RACAP 1998]). Among a range of initiatives suggested by RACAP was the development of a 'use of force register' system, to record data on incidents involving police use of force. A formal submission for the development of such a system has been placed before the QPS Information Steering Committee by Project Lighthouse. Further, the National Guidelines called for police management to establish compatible Use of Force Databases in each jurisdiction (recommendation 10, NPRU 1998). The Victoria Police have established a Use of Force Register for this purpose.

## Chapter 5: Results

*The case studies referred to throughout this chapter appear at the end of the chapter.*

### Number of OC spray incidents

There were 35 incidents involving OC spray during the trial.<sup>35</sup> All but one of these occurred in the second six-month phase; seven involved uses against threatening or attacking dogs (see page 20). Of the 28 incidents involving uses against people, there were 37 deployments of OC by an officer against a subject and three recorded uses where there was no deployment — that is, the spray was presented at the subject, but not discharged (see table 2).

Information on OC use from other jurisdictions was obtained to compare usage rates. Unfortunately, the data do not allow direct comparison using a standard measure (such as number of uses per trained officer), but do give a broad indication of the respective levels of use. For example, the SA Police recorded 55 uses (42 deployments) statewide in the latter six months of 1998 (although OC was not yet fully implemented statewide in that period).<sup>36</sup> The Victoria Police recorded 90 ‘incidents where spray was discharged’ statewide for the same period.<sup>37</sup> On the basis of the limited data available, usage by police in the Queensland trial may be comparatively high (see ‘General observations’, page 25).

### Officer characteristics

Of the 28 incidents involving uses against people, the highest number of uses was by officers from Logan District and, in particular, Logan Central Division (see table 2).

**Table 2: Posting of officer using OC spray**

QPS District/Division	Incidents	Uses	Deployments	Uses without deployment
<b>South-Eastern Region:</b>				
<b>Logan District</b>				
Logan Central	11	16	16	0
Beenleigh	2	2	2	0
Browns Plains	5	7	6	1
Beaudesert	2	4	4	0
Slacks Creek	1	3	3	0
<b>Metro North Region:</b>				
City	2	3	3	0
Fortitude Valley	3	3	2	1
<b>Outside trial areas:</b>				
Ferny Grove	1	1	1	0
Goondiwindi	1	1	0	1
<b>TOTAL</b>	<b>28</b>	<b>40</b>	<b>37</b>	<b>3</b>

Source: QPS Use of Force Incident Reports

Note: The Goondiwindi incident involved a NSW police officer from Boggabilla acting in his capacity as a special constable in Queensland and in response to a request from Goondiwindi police for assistance (see Case Study A). The Ferny Grove incident involved a use by an officer from Ferny Grove Division, who was provided with OC spray by an officer from City Division, with the authorisation of a commissioned officer at the scene (see Case Study B).

<sup>35</sup> There have been only three uses in the three months since the trial ended; one of these was against a dog.

<sup>36</sup> Correspondence received from SA Police 11 March 1999 (data excluded uses against animals). The SA data showed a relatively high number of uses in remote areas of the State.

<sup>37</sup> Correspondence received from Victoria Police 6 April 1999. Data excluded uses against animals; there were eight such incidents in the period.

Of the 26 officers who reported using OC spray, 24 were male and 2 were female.<sup>38</sup> The gender ratio of officers trained to use OC was about four males to one female.<sup>39</sup> It would appear, therefore, that male officers were proportionally much more likely to use OC than female officers, assuming that an equivalent proportion of the male and female officers trained were typically on operational duties and carrying OC (and bearing in mind that this is a small sample).

Almost all police were uniformed officers (only one officer, from the Juvenile Aid Bureau, was on plain clothes duty) and most were at Constable rank (see table A1 in appendix F). Three officers used the spray at two separate incidents during the trial period, with one officer using the spray at three incidents. Two of these officers were from Logan Central and there was one from each of Browns Plains and Fortitude Valley.

### **Regional variation in usage**

The much higher usage in Logan District compared to City or Fortitude Valley does not appear to be a reflection of differences in the number of officers trained in OC use, or of relevant offence ‘profiles’ (the number of assault and good order offences recorded for each area).<sup>40</sup> (See table 3.)

Possible reasons for the difference in usage between Logan, City and Valley were investigated by Project Lighthouse staff, who found that officers from the City and Valley were not routinely carrying OC on all shifts. Questioning of some officers from those stations provided reasons related to the nature of police work in and around the central business district; specifically, reluctance by officers to use OC indoors, in crowded public places, or with groups of intoxicated subjects.

In a further attempt to find an explanation for the different rate of usage, the survey respondents were asked to state whether or not they carried OC on duty on most shifts. Thirty-two of the 72 respondents did not normally carry OC on duty; 26 of these were from Logan District, which was an unexpected finding.<sup>41</sup> Unfortunately, few respondents who did not carry OC explained why. Of those who did give a reason, most explained that they were either Inspectors not trained in OC use or officers who normally worked inside the police station. However, other respondents made the following general comments relevant to this matter:

- Several City officers commented that OC was often not suitable for the situations typically occurring in that Division.
- The time taken by after-care was a concern during peak workload times, as it would keep officers ‘off the road’ for too long (City officer).
- There was a need for canisters with a greater range, as officers ‘... have to approach too close to an offender who is armed ...’ (City officer).
- There was confusion among some officers about whether OC may be used against violent offenders ‘only as a last resort’ (Valley officer).
- With station issue, it was sometimes difficult to obtain OC, due to limited supplies, or unavailability of a supervisor to unlock the storage cabinet (Valley officers).

---

38 Officers who used spray were counted only once, even if they used spray on more than one occasion.

39 Gender of trainees, where recorded: male: 389, female: 92. (POST Unit, QPS Academy)

40 It is possible that the use of OC had an impact on offending levels. However, the number of offences was very similar over the same period one year before.

41 The nature of the officers’ normal duties was not requested by the survey.

**Table 3: Comparison of OC usage, officers trained and offences recorded**

District/Division	No. OC uses	No. officers trained in OC	No. assaults	No. good order offences
Logan District	32	247	482	157
City	3	136	343	506
Valley	3	81	137	217

Sources: POST Unit, QPS Academy; QPS CRISP system (preliminary data only)

Note: Offence data are preliminary. Offences recorded are for the period October 1998 to February 1999 inclusive. (Offences have not been shown as a rate 100,000 population, because of the high level of non-residents frequenting the City and Valley.)

## Subject characteristics

OC was used against a total of 40 subjects in the 28 incidents during the trial. In four incidents there were two subjects sprayed and in a further four incidents there were three subjects sprayed.

Of the 40 subjects sprayed:

- 37 were adult males, one was a juvenile male, and two were adult females  
Both uses against females involved the subject threatening self-harm while armed with broken glass. OC was deployed against one of the female subjects, who had cut herself and was known to have a history of mental illness. She was subdued without further injury and taken to hospital. In the other incident involving a female subject, presentation of OC by police deterred her from proceeding with her threat of self-harm.<sup>42</sup> The use against the juvenile involved an assault on police by several males at a disturbance in a street.<sup>43</sup>
- most were aged in their 20s (see table A2 in appendix F)<sup>44</sup>
- 22 were reported by police to be affected by alcohol and/or drugs<sup>45</sup>
- 9 were reported to be ‘under psychiatric care’.<sup>46</sup>

A check of the offence history of all subjects revealed that most had a previous criminal, good order or other offence history in Queensland.<sup>47</sup> There were 21 subjects with an offence history, 10 of whom had been arrested for violent offences. A further three were recorded as known or wanted by police, but had no offence history. A further 11 subjects had no history of contact with the police prior to the spray incident.

## Incident characteristics

Of the 28 incidents involving uses against people, most occurred following police response to a reported disturbance, suicide attempt or siege, or report of domestic violence (see table A3 in appendix F). Six incidents involved an apparent suicide attempt by the subject; in a further three incidents the subject requested police to shoot him/her.

The majority of incidents occurred in the hours of darkness (see table A4 in appendix F). Most incidents occurred between Thursday and Sunday, with the highest frequency on

42 Police then deployed OC at a male subject who threatened police.

43 A complaint arose from this incident. See later discussion of complaints.

44 The age profile of subjects sprayed with OC corresponded quite closely to the (statewide) age profile of offenders charged with either assault or good order offences (published in the *QPS Statistical Review 1997–98*).

45 These numbers are likely to under-report the actual total, as the Use of Force Incident Reports submitted varied in the detail provided.

46 Police volunteered this information in their reports, using various terminology; it was not a requirement of the Use of Force Incident Report.

47 Due to time constraints, this was a limited check of the QPS offender history system.

a Saturday (see table A5 in appendix F). There was an average of about four incidents per month, with the exception of a cluster of seven incidents around Christmas Day.

The type of location of incidents is shown in table A6 (in appendix G). Seventeen incidents occurred outdoors and 11 incidents occurred indoors. This indicates that police were not reluctant to use OC indoors, even though the burst type spray may result in secondary exposure when used indoors. On the other hand, a small number of survey respondents stated that they would not use OC indoors.

### **Subjects in custody**

The most problematic uses of the spray occurred when a subject was already in police custody (such as restrained in handcuffs and/or placed in a police vehicle). Two complaints arose from such incidents (see 'Complaints', page 22).

Four incidents involved the subjects being sprayed while in custody in a police vehicle.<sup>48</sup> In each case the use of spray was in response to reported violence by the subjects; all were reportedly kicking at police officers attempting to restrain them. In two of these incidents another subject in the police vehicle received secondary exposure to OC. Three incidents occurred at a police station. On two occasions the subjects had attended of their own accord and threatened police. (For one example see Case Study A.) In the other case a fare evader was taken by taxi to the police station and later threatened police. There were no uses of OC in a police watchhouse.

### **Degree of threat to police**

As noted in chapter 4, it was sometimes difficult to determine, from police reports, the level of violence or degree of threat directed at police. In most incidents it appeared that police were in danger of receiving a serious injury.<sup>49</sup> At one incident there was little overt threat to police (see Case Study C).

There were 11 incidents in which subjects were armed with a weapon. The weapon was a knife or other sharp-edged weapon (such as a broken glass or bottle) in seven cases, and 'other' weapon in four cases (broom handles, bottle, petrol). There were a further five incidents in which subjects were either reported by witnesses to have a weapon, had a weapon nearby, or threatened police with a weapon, though none could be seen by police.

At several incidents, police used another force option *before* using OC spray. At four incidents, officers struck the subject with a baton. Police reported drawing their firearm against five subjects, although there were no firearm discharges. Handcuffs had been applied in another four incidents.

The survey attempted to determine which use-of-force option/s officers would have deployed had they not had access to OC. The 22 survey respondents who had used OC indicated that if OC had not been available at the time of the incident they would have used another force option as shown in table 4. Respondents could nominate more than one option.

The responses shown in table 4 suggest that officers considered the level or threat of violence serious enough to warrant the use of hand tactics, baton or firearm in many cases (as noted above, firearms were drawn at five incidents). It follows that, in the absence of OC use, injury to the subject or police would have been a possibility in many cases.

---

<sup>48</sup> A complaint arose from one of these incidents.

<sup>49</sup> The offence history information, outlined above, indicated that at least some of the subjects had a propensity to violence.

**Table 4: Alternatives nominated by officers who used OC spray**

Force option	Number
Baton	16
Handcuff	12
Open or closed hand tactics	15
Tactical withdrawal	6
Firearm	5
Other (not stated)	1

Source: Survey undertaken by Steering Committee

## Outcomes of uses

### Effectiveness

The Use of Force Incident Reports received indicated that OC spray had a very disabling impact on 25 subjects, but had a lesser effect on 12 of the subjects. The latter category consisted of:

- 2 subjects who avoided or partly avoided the spray
- 10 subjects who were affected by alcohol and/or drugs and were behaving very aggressively.

Of the 22 respondents to the survey who had used OC spray, 18 agreed that they found OC to be an ‘effective’ use-of-force option. One respondent found OC was not effective, but commented that ‘the offender was high on speed at the time, so the spray was not as effective’.<sup>50</sup> Another commented that while it did not completely stop the offender from continuing to be violent, it did allow police to restrain the offender.

As noted in chapter 1, it appears that OC may be less likely to incapacitate some subjects affected by alcohol/drugs and/or those who are highly aggressive or mentally stressed, although this does not mean that OC is totally ineffective against such people.<sup>51</sup>

Police deployed another force option (excluding handcuffs) *after* using OC on a small number of occasions; firearms were drawn on one subject (not discharged), four subjects were struck with a baton, and a police dog was also used against one of these subjects (see Case Study C). In all but one of these cases the spray had little impact, leading officers to use another force option. In the other case, an officer used a baton to subdue and handcuff a subject who had dropped a knife after presentation of OC by police (see Case Study A). Only two subjects were not apprehended by police during or soon after the time of the incident, because they had decamped immediately the spray was deployed.<sup>52</sup>

### Injuries

There were few injuries to any person as a result of police intervention. This finding is consistent with research findings, as outlined in chapter 1. Most subjects (28) reportedly received no injury, either prior to or during the incident. Police reported that four subjects received an injury during their contact with police, with eight subjects reported to have been injured prior to police contact.<sup>53</sup> In the latter cases, injuries had resulted

50 The remaining two respondents answered ‘unsure’ to this question.

51 Kaminski et al. (1999) have devised a useful categorisation of the behaviour of subjects after exposure to OC, which ranges from ‘incapacitated’ to ‘no effect’.

52 One of these subjects was known to police and was later issued with a Notice to Appear. The other subject was not recognised, as it was dark and the subject assaulted the police officer from behind before decamping as soon as spray was deployed.

53 Police did not report any injuries to subjects resulting from baton strikes. It is most likely that some injuries occurred in this way, but it appears that these may have been superficial; e.g. bruising. In each case baton strikes were reportedly directed at the upper legs of subjects

from involvement in activities such as fights or self-harm. With a small number of exceptions, injuries to subjects were relatively minor, although most required medical attention (usually to treat cuts). The most serious injuries to subjects were a self-inflicted abdominal stab wound, an overdose of prescription drugs and self-inflicted cuts.

No officer reported any subject suffering asthma or severe respiratory difficulties as a result of being sprayed. Two survey respondents who had used spray noted that subjects had experienced minor, temporary breathing difficulties, but did not require medical attention. One of these officers described the situations:

Initially the spray subjects experienced breathing difficulties (i.e. erratic breathing). However, both times, after being reassured and receiving post-spray care, they overcame their panic and resumed normal breathing.<sup>54</sup>

The symptoms described are quite typical for people sprayed with OC.

In all but three incidents, there were no injuries to police. Four officers received an injury during an incident. The severity of injury was generally minor, with three officers suffering abrasions and bruising, which did not require medical attention. The other officer required attention at hospital for a broken wrist (received in a struggle to arrest a subject who had been in possession of several knives and who was violently resisting arrest). One survey respondent who used the spray commented: 'But for the spray, I believe I would have ended up in hospital'.

### **Secondary exposure**

Police received secondary exposure to OC at 12 incidents (out of the total of 28 incidents). Secondary exposure occurred:

- nine times due to OC suspended in the air  
Three of these instances involved confined spaces or indoor areas where the OC spray may not dissipate quickly. In all but one instance the situation apparently did not allow officers to prepare themselves with protective equipment; during the other incident the wearing of a face mask may have been inappropriate due to the officer negotiating with the subject prior to using OC.
- three times due to OC contact from touching the subject  
In these instances the officers were apparently not using protective equipment when providing after-care to the subject.
- once due to residual OC soaking into the officer's clothing.  
It was reported the effects of this could be felt over a number of hours.

At a small number of incidents people other than the subject or police received secondary exposure to OC. Exposure occurred either to another arrested person, as outlined above, or to onlookers or participants in a street disturbance.

### **Uses against dogs**

Of the seven incidents involving dog attacks, the spray was effective in deterring the animal in all but one case.<sup>55</sup> In that case, the canister failed to discharge, although it was later tested and found to be functioning. There were no injuries to any police officer in incidents involving dog attacks.

In one incident, police encountered a dog protecting its owner, who was hanging himself in a suicide attempt. Deployment of OC against the dog allowed police to attend to and

---

<sup>54</sup> Monitoring and reassurance of the subject are part of the training police receive in after-care procedures.

<sup>55</sup> One of these incidents did not involve a dog attacking an officer; it involved a dog attacking a pup.

revive the man. In another incident after the trial ended, police had to spray two dogs guarding a man lying in a driveway. The OC spray subdued the dogs, but the man was found to be dead, from natural causes.

## Non-compliance with policy

There were a number of incidents where police did not comply with some aspect of the draft policy.

The draft policy prohibits officers not trained in its use from using OC spray. There was one use by a police officer not trained to use OC spray (see Case Study B). This incident occurred outside the trial areas. OC spray was considered by the Steering Committee to be an appropriate choice of force option for the circumstances of that incident. Its use by an untrained officer in that case was also considered to be a justifiable exception to the policy.

Police are required to give a spoken warning before spraying a person. The warning has a twofold purpose: to give fair warning to the subject that he/she may be sprayed and to alert other police present that spray may be about to be deployed. In stipulating this in the draft policy, the Steering Committee was aware that some situations could preclude a warning being given. Warnings were given to subjects prior to spray being used on most occasions, according to the Use of Force Incident Reports received. A warning was not given in seven incidents. In each case it appeared that the urgency of the situation precluded a warning being given.

After-care is required to be given to people sprayed. Police reported that they provided after-care after most incidents.<sup>56</sup> Five subjects were not given after-care by police for the following reasons: in two cases the subject reportedly refused all assistance; two subjects decamped the scene and were not apprehended; one subject did not require after-care because he had completely avoided the spray. It was not uncommon for subjects to initially refuse police assistance, and on a small number of occasions police reported that they forcibly commenced after-care. Some of these subjects, typically under the influence of drugs and/or alcohol, reportedly remained very aggressive towards police.

Several survey respondents commented on the lengthy observation/after-care period (describing it as a disadvantage of OC spray), which provides further indication that police were carrying out after-care.

There were no incidents involving OC use as a general crowd control measure. As noted above, such use was specifically prohibited in the draft policy. One survey respondent requested better guidance regarding use 'in crowd control situations'.

It was notable that, during the trial period, an Operational Order was issued by the QPS in regard to the policing of the industrial dispute on the waterfront: officers were not allowed to carry OC (or firearms) at the site of the dispute.

## Accountability mechanisms

The information provided by police reports of OC use was usually sufficient for the purposes of the evaluation, but some detail was not readily available, such as the quality of the local supervisor's review. In an attempt to ascertain whether supervisors were routinely reviewing OC use incidents with officers involved, the survey asked officers to respond on this matter. Of the 22 respondents who had used OC, three stated that a supervisor had not reviewed the incident with them.

---

<sup>56</sup> In some cases, after-care was continued by ambulance or medical staff.

The Steering Committee did not learn of any deployments of OC that had not been reported by police.<sup>57</sup> It is quite possible, however, that police may not have reported some non-deployment uses (see ‘Deterrent effect’, page 25).

As noted above, it was reported by both operational police and supervisors that the daily issue and return of OC canisters added an administrative burden to establishment management. It was recommended by trial staff that local management policy and procedures be adopted for the issue of OC. This may in many cases enable an officer to be issued an OC canister, from establishment supplies, for long-term carriage and return when used. As with firearms, OC could be issued on a personal basis and stored securely at the police station when the officer is off duty.

An audit of OC management supports the comments regarding canister issue made by survey respondents. All but one of the OC canisters issued to each trial area were accounted for, including used and unused canisters.<sup>58</sup>

The audits did, however, reveal some inconsistency in canister issue and return at a number of establishments. It was found that some officers failed to return canisters at the end of each shift and the record keeping of the movement of canisters was inadequate. Used OC canisters were returned to the Academy POST Unit, which issued the original OC supplies and which was responsible for receiving all used materials.

These difficulties would appear to be associated with the increased administrative responsibilities required of the daily movement of canisters between officers. They also indicate a requirement for further systems to be developed for the effective issue, movement and return of canisters, both from a Service and local management perspective.

## Complaints

There were five complaints lodged with the CJC or the QPS about the use of OC during the trial.<sup>59</sup> Such a rate of complaint (four complaints from 28 incidents, with one unrelated to a reported use — see below) appears high, but it is difficult to make a judgment in this regard.

The circumstances and outcomes or status of these complaints are briefly outlined below:

- The wife of one subject complained about police using OC in her home, with her baby present in another room. (After spray deployment, all residents apart from the subjects evacuated the house.) The CJC referred this matter to the QPS for informal resolution.
- A juvenile who, together with others, assaulted police at a street disturbance, complained that he was surrendering to police when OC was used. The CJC investigated this complaint and decided that no further action was warranted.
- Two brothers who had been arrested for drunkenness complained that OC was used as they were placed in the police van. Police reported that they had resisted violently. The CJC referred this complaint to the QPS for investigation. The investigation had not been completed at the time of reporting. (See Case Study D.)
- A man who had been fighting in a hotel and had been arrested and handcuffed by police complained to the QPS about being sprayed. Police reported that he had resisted violently. The QPS Ethical Standards Command referred the matter for informal resolution.

---

<sup>57</sup> An allegation about a threat to use OC was the only exception to come to attention (see ‘Complaints’).

<sup>58</sup> The single canister not accounted for was not located by the time of reporting.

<sup>59</sup> Since the trial ended, there has been one further complaint received in relation to OC use: an officer is alleged to have threatened to spray a dog.

- A woman complained that detectives searching her home for her son had presented OC to her husband and threatened to use it. (This complaint was not related to a reported use incident, the only such complaint received.) This matter had not been finalised at the time of reporting.

Of the complaints received, the use in the police van and the allegation of threatened use would seem to be of most concern, but at the time of writing neither matter had been finalised.

Complaints of misconduct, relating to allegations of assault or use of excessive force by officers from the trial areas, appear to have fallen slightly with the introduction of OC in Logan District. However, the number of these complaints rose in both City and Valley Divisions. See table 5.

**Table 5: Complaints of misconduct relating to assault or excessive force by police**

<b>Trial area</b>	<b>Av. no. received per 6 mths: 1992–98</b>	<b>No. received: 10.97 – 3.98</b>	<b>No. received: 10.98–3.99 (Phase 2 of trial)</b>
Logan District	12.8	15	11
City Division	13.6	16	21
Valley Division	8.8	12	15

Source: CJC complaints database

Note: These are complaints received by the CJC or QPS which may result in a ‘misconduct’ finding (excludes complaints which may result in a ‘breach of discipline’ finding, which are less serious).

## Training

Steering Committee members who undertook the training believed that it was of a high standard (i.e. the content, instruction, documentation and practical exercises). However, as the Steering Committee was directly involved in the development of the training, survey respondents were requested to provide their perspective on the quality of the training. The survey respondents almost unanimously agreed with the statement that ‘the training was adequate’ (as opposed to inadequate), and also provided several positive comments.<sup>60</sup>

The training course and documentation need only minor adjustments for future training requirements. The survey comments have been given to the POST Unit for consideration.

It is important to note that police suffered some residual effect (secondary exposure) from using OC in several incidents. Some of these instances were relatively serious in that police were either fully or partially debilitated to the extent that it temporarily kept them from performing their duties and may have put them at risk of harm. (See Case Study E.)

As one survey respondent commented:

I have experienced secondary exposure ... at a violent incident ... my trainee of three months who had not had any exposure to the OC spray reacted badly to the exposure. He did not know what was coming and was unable to assist initially with the arrest of the offender. I feel that if the trainee had some exposure to the spray at the Academy, he would have been better prepared.

The Steering Committee and OC training staff believed it was necessary to provide all officers with some secondary (and in some cases a primary) exposure to OC under

<sup>60</sup> The sole contrary comment expressed a desire for a longer period at the practical exercises.

controlled conditions during training.<sup>61</sup> This was intended to:

- prepare officers for possible future exposure, knowing that they can retain their firearm even if sprayed, and are aware of their likely personal reaction to the spray
- make officers aware of the need to take what action they can to avoid such exposure.

The review of both the effects of OC on the sprayed subject and the secondary exposure of police has reinforced the need for the application of immediate after-care and the use of protective equipment by police. In the majority of OC use incidents during the trial, where the subject was not suffering from an injury sustained independently of OC use, simple after-care using water and soap was adequate. Police officers, however, also suffered from secondary exposure as a result of providing this after-care and/or handling the contaminated subject.

Further precautions are required by police when using OC to minimise the effect on officers. This should include:

- the issue and use of protective latex gloves, for use when handling a subject
- making available alternative delivery systems (see ‘Product performance’ below)
- whenever possible, allowing time and space for OC to take effect on a subject and, if a burst-style canister is used, allowing for the airborne OC to dissipate.<sup>62</sup>

## Product performance

The product assessment and training course highlighted some shortcomings with both the product chosen and the type of product. In the product used, the spray nozzle can move laterally slightly, possibly affecting accuracy; the range and accuracy of burst-type spray is limited by breezy conditions; the range of the spray may sometimes be too short for officer safety; and the use of the burst-type spray can result in secondary exposure as it tends to ‘hang’ as a mist indoors (including inside vehicles) and pass into air-conditioning systems. Outdoors, it can blow back onto police should it be deployed into the wind. Survey respondents’ comments supported these observations.

Some further problems with the product and the pouch for holding the canister were identified by police during the trial:

- There was one unexplained failure of a canister to trigger (the canister worked on later test).
- There was one case of the pouch cover impeding extraction of a canister (under the extreme pressure of the situation). (See Case Study F)
- ‘Wear and tear’ of pouches, which were not personal issue, arose from continual removal and replacement on utility belts, which damaged the velcro, resulting in pouches coming loose or falling from the belts.
- The ‘integrity seal’ was also a concern to some survey respondents, as the seals tended to break from repeated testing on issue.

Some of these concerns could be addressed by personal issue of OC (see ‘Accountability mechanisms’, page 21). There appears to be a need for alternative OC delivery systems, such as streamer or foam, for use within confined spaces or indoors, to lessen the risk of wider contamination by airborne residue, and for increased range and accuracy,

---

61 Such exposure is not classified as an ‘injury’ as defined under the *Workplace Health and Safety Act* unless it requires either first aid or medical treatment, which OC exposure typically does not require.

62 This was emphasised during the training course, but on occasions officers did not or could not position themselves away from the sprayed subject or spray residue.

particularly in adverse weather conditions.<sup>63</sup> Despite the concerns outlined, the selected product appeared to be effective.

## General observations

### Deterrent effect

As previously discussed, there was evidence that deployment of OC deterred further violent behaviour by sprayed subjects, although this was not the case at every incident.

During the trial, there were only three reported uses where subjects ceased their violent behaviour on presentation of OC by police (with no OC discharge). One of these non-deployment uses was at a self-harm incident. (However, survey respondents' comments indicated that non-deployment uses may have been under-reported, see below.) This level of non-deployment represented a small proportion of all incidents, which indicated that mere presentation of OC was typically not much of a deterrent. Some reasons for this may include:

- a rapid sequence of events during the incident
- lack of understanding by the subject of the impact of OC
- the subject's state of mind, influenced by alcohol/drug consumption.

There was little evidence of any 'velcro effect' (Kaminski et al. 1998). This refers to the supposition that subjects will become compliant upon realising that police in attendance have OC spray (when the subjects hear the velcro fastening of the pouch containing OC being opened). The trial was too short and the trial area too small to provide conclusive evidence of a deterrent effect or otherwise. In addition, as some survey respondents commented, the OC spray trial (and information about the impact of OC) was not broadly publicised in the trial areas, so many subjects may have been unaware of the impact of OC deployment. However, many survey respondents reported that carriage of OC deterred violence at several incidents (see comments below). Other respondents noted that some subjects were not deterred by police carriage of OC, possibly often due to intoxication or aggressive mental state.

Officers' opinions were divided on whether the introduction of OC had an impact generally on the level of violence directed toward police. For example:

'City Division is experiencing an increase in street violence which in my view is not being deterred by the carriage of capsicum spray by police. Probably the publicity in relation to capsicum spray has diminished ...'

'I don't think that the carriage of spray has deterred violent behaviour. I think if you're going to fight a police officer carrying a gun you're just as likely to fight one who is carrying the spray!'

On the other hand, most respondents who commented believed that OC was a proven deterrent:

'Acts as a visible deterrent — many instances where offenders behave after seeing spray in hand. Many people know police have capsicum spray and what it can do.'

'... recently a violent offender was resisting arrest and police were having trouble restraining. Offender was threatened with cap spray and immediately complied with police. Offender stated he had heard about the spray!!!'

'When you attend a violent situation you have the capsicum spray in your hand readily visible. This has proved on a number of occasions to be a good deterrent to further violence.'

<sup>63</sup> It may be preferable to have pairs of officers carry one burst canister and one streamer or foam canister.

‘... I have produced the spray on two occasions and told the offender I am about to use it, and this has instantly resulted in compliance by the offender.’

‘I was in a group of about five males fighting and I was a single officer with my partner ten metres behind. I yelled once ‘Stop or I’ll spray’ and instantly one dropped to his knees and yelled ‘Don’t spray’ and the others all raised their hands. I presume he had previous experience with spray. I was most impressed with the result.’

‘I have had to use the spray ... The offenders who frequently play up have ceased their activities entirely.’

‘... have threatened to use it on more than five occasions successfully.’

### **Police officers’ views about OC**

Survey respondents were asked if they thought the advantages of OC outweighed the disadvantages. The majority (46) responded that it did, although 13 stated that it did not.<sup>64</sup> Of that 13, four had used OC. Comments by respondents were very much in favour of OC issue, despite its disadvantages or shortcomings. For example:

‘Although policy prevents widespread use (which is sensible) and the occasions on which it is appropriate to use OC are rare, the fact it may prevent some form of violence towards police and the use of lethal or dangerous force is a good thing. Capsicum spray should be maintained as a use-of-force option ...’

‘... in all I feel that capsicum spray has made the job of dealing with violent non-compliant offenders a lot easier ... the benefits clearly outweighed any disadvantages.’

‘The inclusion of capsicum spray in the police tool kit is invaluable and saved police and offenders very serious damage ... The use of capsicum spray cannot be lost.’

‘We should have had this years ago. It would have saved a lot of excessive force allegations.’

‘Simply the best police tool I have seen since I started in 1990.’

‘It would be a great shame if the Service withdrew the spray’.

‘Should be issued to all police statewide’.

‘A good idea long overdue’.

### **Familiarity of officers with OC**

Based on the sequence of OC incidents, the information obtained from Incident Reports and police officers’ comments, it appeared that police officers at Logan District developed both familiarity with the processes involved in OC use and confidence in the utility of OC. From this, the following hypothetical sequence could, given some assumptions, describe the introduction of OC:

- The rate of use may be low initially, until police overcome a reluctance to use OC.
- The rate of use then increases as police become more willing to use OC.
- Finally, the rate of use stabilises, as knowledge about the effects of OC has passed around the local community, and police make it known at incidents that they are carrying OC, which combine to have a general effect of diffusing violence towards police.<sup>65</sup>

This hypothetical sequence did not occur in the City and Valley, where OC was used much less. Comments by survey respondents from these stations suggest that, particularly

---

64 A further 13 were unsure.

65 On completion of the trial, the issue of OC to police in the trial areas continued, pending a decision on the recommendations of this report. Officers were to continue to report uses of OC. In the three months since the trial ended, there have been only two reported uses against a person.

given the types of incidents that occur in those areas, police have not become as familiar with, and confident in, OC as a use-of-force option. For example: 'Capsicum spray hasn't been used to a great extent in the Valley, most likely due to officers not knowing exactly where they stand in relation to its use and/or them not wanting to abuse the privilege'.

## Case studies

### Case Study A

*This case study demonstrates OC acting as an effective deterrent, ending the threat of violence. It also shows that a very different outcome may have resulted had OC not been available and police had used lethal force.*

Several officers were at work in a country police station (outside the trial areas) when a man came to the station and began beating upon its locked front door. Police saw that he was armed with a knife. The man demanded that police shoot him, then beat his head against the glass door until it broke, cutting his head. The man backed away from the door and onto the street, continuing to demand that police shoot him and threatening police with the knife. A request for assistance was radioed to NSW police in a nearby town, as they were known to be equipped with OC spray. The subject continued to call for police to shoot him, and continued to threaten and rush at police with the knife. Several times police, who had firearms drawn, aimed at the subject and requested that he put down the knife. NSW police arrived, and police warned the subject that he would be sprayed if he did not surrender the knife. The subject then put down the knife. (Spray was not deployed.) Police struck the subject once on the legs with a baton to force him to the ground, then handcuffed him. An officer inside the station recorded much of this incident on video. The subject was later treated for cuts at hospital, after initially refusing medical attention.

### Case Study B

*This case study illustrates that OC can be very effective in preventing suicide and serious self-harm.*

Police attended an incident at a Brisbane northern suburbs railway station, where a man had doused himself with petrol and threatened to set himself alight. Two officers, untrained in the use of OC, established some rapport with the subject. Other, trained officers who were carrying spray were in attendance, but the subject stated that he would carry out his threat if these officers moved within close proximity. A commissioned officer at the scene authorised one of the untrained officers to use OC spray, with a view to resolving the situation safely. That officer was given impromptu instruction on deploying the spray, and later used the spray to subdue the subject without injury to anyone.

### Case Study C

*This case study demonstrates a use-of-force decision-making process, with various options being employed. Although this use was against a 'passive' subject, police used force options in response to their perception of the total situation, including the possibility that the subject was armed and a potential threat to police and others.*

Two police officers attended the entrance to a Brisbane city hotel, where they met a security guard who gave them a large hunting knife taken from a man recently ejected from the premises. Police went in the direction the man had taken and entered a multistorey car park, where a staff member informed them that customers had just told him they had seen a man armed with a large knife.

Police found the subject lying under a car. The officers requested the subject to come out several times, but he said that he would not. Police asked whether he had a knife, but the man did not reply, so the officers informed him that they wanted to detain him for a weapons search. The subject held his arms close to his chest and police could see that he was holding an object with a brown handle. The subject still refused to come out from under the car or say what he was holding, despite further requests by police.

Police again requested that the man come out, then warned him he would be sprayed if he did not. The subject questioned police about the type of spray and about the type of firearms they had, and appeared interested in how police had their weapons secured. The subject then said that police would have to spray him. Police believed that the subject was trying to draw them close to him. Police deployed spray, but the subject had 'screwed his face up tight' and moved further under the car, and appeared to be unaffected by the spray.

Car park customers approached police and said that they had seen the man holding a knife and were afraid of him. Police were also aware of other people sitting in cafes a short distance away. Police again deployed spray and the subject coughed and appeared to be affected, but refused to move. A police dog squad officer then arrived with a police dog. Police attempted to pull the subject out, but could not. Police attempted a baton strike of the subject's arm, with no effect. The police dog then held the subject's arm and police were able to pull the subject out and handcuff him. He was treated for the effects of OC. Police found that the subject had been holding a hair brush, but had no weapon. A search of the area located a bag containing items belonging to the subject, including a receipt for one knife and an empty box for another knife. The subject smelt of alcohol and told police he was taking medication for depression. The subject was taken to hospital for treatment of dog bites. Police were not injured. Police learned later that the subject had extensive service with an elite British military squadron.

### Case Study D

*This case study shows the problematic nature of some uses against subjects in custody, in this case in a police vehicle (but alternatively, for example, in a watchhouse cell). Possible secondary exposure of other people and contamination of the vehicle or watchhouse are two factors that officers need to consider prior to deployment in these areas.*

Police attended at a suburban service station and arrested two brothers for drunkenness. The two subjects were placed in the rear of a police van. As police attempted to place another subject in the van, police reported that the two subjects in the van kicked open the door and attempted to kick and punch police. A warning was given before police deployed OC. The subjects were immediately subdued. The two brothers received primary exposure and the third subject received secondary exposure. (Police reported the incident as three uses.) Police closed the van door and drove the vehicle a short distance away from the scene, in order to provide after-care. There were no injuries to subjects or police.

Complaints were made to the CJC by the two brothers. One complainant claimed that he had not been drinking prior to the incident. The Watchhouse Manager stated that the complainant was drunk when received at the watchhouse. It was noted that this complainant had a broken leg in plaster and was using crutches at the time of the incident. The complainant was reported by the arresting officers to be using the plaster to lever his body upwards and kick at police. The CJC referred this matter to the QPS for investigation.

## Case Study E

*This case study shows that:*

- OC is not always effective
- OC is only one of a number of force options that may be used during the same incident
- officers should experience secondary exposure in training
- where possible, officers need to act to avoid secondary exposure.

Two police officers attended a Brisbane southern suburbs residence with a warrant to apprehend an absconded mental patient. The subject was located but threatened police, who presented OC and warned the subject. The subject, a very large man, was escorted towards the police vehicle, but then ran away. While pursuing the subject, one officer's baton became dislodged. Officers caught the subject in the middle of a road, stopping traffic in both directions. Police again warned they would use OC. The subject then ran back towards the baton and attempted to pick it up. Police struck the subject once on his right leg with a baton, with no effect. Spray was deployed, but the subject turned his head away, avoiding most of the spray. Subject ran off again. The officers immediately gave chase on foot, but both ran through the spray mist. One officer was overcome by the spray and had to stop. The other officer continued in pursuit of the subject, with one eye closed because of the effects of OC. The subject stopped and turned towards the officer, who again deployed OC, in two short bursts. Again the effect of OC was limited, as the spray hit the subject's bearded lower face. The subject again ran away. The subject then suddenly stopped and allowed police to apprehend him. Subject was reported to be laughing as he was handcuffed, and was later admitted to the mental health ward of the local hospital. There were no injuries to the subject or police, although for some time secondary effects of OC continued to cause discomfort to police.

## Case Study F

*This case study demonstrates that OC is an additional use-of-force option, not a replacement for any current option which may be more appropriate in the circumstances of an incident.*

Two police attended a residence in Brisbane's southern suburbs in relation to a reported disturbance. After their arrival they looked through a window and saw a woman holding a knife to her throat. The officers attempted to talk to the woman without success, before moving away to await support. A short time later the woman emerged from the residence brandishing the knife above her head and threatening police. She approached the officers, who retreated to a car park. Police requested that the subject put down the knife, but she ignored their request. The subject continued to advance threateningly towards police, and rapidly moved close to one officer, who unsuccessfully attempted to pull out an OC spray canister. (The officer had received OC training just two days before this incident.) The officer stumbled as he moved backwards, then drew his firearm and fired two shots at the subject, hitting her with both.

The subject continued to advance on the officer, who fired another shot, hitting the subject again. The subject then turned towards the residence and walked back inside, locking the door. Other police arrived and forced entry to the residence, where they found the woman. She was transported by ambulance to hospital, where she later recovered from her wounds. Police were not injured in the incident.

## Chapter 6: Conclusions and recommendations

### Conclusions

From the findings described in the previous chapter it was possible to make the following conclusions:

*Did OC spray effectively subdue the people sprayed?*

OC spray was found to be effective in subduing people threatening or assaulting police officers in the majority of incidents. On some subjects OC had less effect, although deployment usually assisted police in subduing these subjects.

*Was OC spray a deterrent to violence towards police?*

While there was no conclusive evidence that OC availability was a deterrent to violence directed towards police, indications are that, with wider implementation and greater public awareness, it could make a positive impact.

*Did OC spray effectively halt attacks on police officers by dogs?*

OC was found to be an effective response to incidents involving aggressive, threatening dogs.

*Were deaths or injuries to citizens and officers caused, avoided or minimised through use of OC?*

There were no deaths, reported injuries or other medical problems as a direct result of OC use. On the contrary, OC use appears to have helped avoid injury or further injury to subjects and police. There were several occasions in which the use of OC resolved incidents that quite likely would have resulted in death or serious injury had OC not been used (such as incidents where officers said they might have used lethal force had OC not been available, or where subjects either requested police to shoot them or attempted to harm themselves). Preliminary indications are that wider availability of OC to police could reduce injury to citizens and police.

*Was the draft policy appropriate and effective?*

The draft QPS policy on OC spray complied with the National Guidelines. The policy appears to give effective direction on use of OC, although some concerns were expressed by a small number of survey respondents. If use of OC by police were to continue, the current guidance on appropriate use would need to be reviewed and clarified.

*Did officers comply with the draft policy?*

It was found that officers generally complied with the draft policy. There were a small number of incidents where the policy was not followed; however, these were examined by the Steering Committee and found to be either not serious or justifiable in the circumstances as reported.

*Was OC used responsibly and appropriately by police? Was it always authorised, proportionate to the threat, properly intended and the least harmful option in the circumstances?*

The Steering Committee found that OC spray appeared to be used responsibly and appropriately by police. The Steering Committee, however, found it difficult to make exacting judgments on each specific incident, without further evidence (e.g. whether

the use of OC was proportionate to the level of threat, or the least harmful option in the circumstances).

*Was the training effective?*

Training was developed on a ‘best practice’ approach and was found to be effective, with some minor improvements required. Quality training of police was considered to be a vital element in the successful implementation of OC.

*Was there a reduction in the number of complaints by citizens of assault or excessive use of force by police?*

In the police district in which OC spray was used extensively, there was a slight reduction in the number of such complaints, but this type of complaint increased in the areas with few uses of OC. However, no conclusion can be drawn from this result, partly because of the limited time frame of the trial.

*Did officers exercise a duty of care to those affected by spray?*

Where it was possible to do so, after-care to sprayed people was provided, either by police or medical/ambulance staff.

*Did the accountability mechanisms function effectively?*

The accountability mechanisms (in relation to incident reporting, storage, issue and return) appear to have functioned satisfactorily, with some administrative difficulties reported. The process of supervisor review could not be satisfactorily assessed, so no firm conclusion was made in that regard.

This evaluation of OC use by members of the QPS was limited in a number of ways, which were outlined earlier in this report. Should OC availability be expanded statewide, its use should continue to be closely monitored to ensure compliance with policy and to provide the QPS with ‘corporate knowledge’ of the experiences of its members. There should also be a further evaluation to gauge long-term statewide trends in the level of violence against police, injury rates and complaints (see Kaminski et al., 1998 & 1999).

## Summary

In short, the aims of the trial were generally met. There were no significant problems with the use of OC spray during the trial. There were strong indications that OC spray would prove a very useful addition to the current range of incident resolution options available to Queensland police.

## Recommendations

1. That the issue of OC spray to operational police be implemented on a statewide basis as soon as practicable.
2. That the statewide implementation of OC spray be overviewed by a joint QPS–CJC Steering Committee, which should report to the Commissioner of Police and the Chairperson of the CJC. The Steering Committee should make recommendations on policy, training, accountability mechanisms, stock management and other relevant issues.
3. That an extensive process of community consultation be undertaken during the implementation of OC spray (including publication of this report, media releases and briefings to community organisations and relevant authorities such as health services), with particular attention to the introduction of OC spray within Indigenous communities.
4. That an evaluation of the impact of OC use by police be carried out by the QPS Ethical Standards Command, in liaison with the Steering Committee, to be completed following 12 months of statewide operation. The evaluation should examine, for example, the level of violence against police, injury rates and complaints against police.

---

## References

- Bailey, W.C. 1996, *Less-Than-Lethal Weapons and Police-Citizen Killings in US Urban Areas*, Crime and Delinquency, vol. 42 no. 4.
- Bobb, M.J., Epstein, M.H., Miller, N.H. & Abascal, M.A. 1996, *Five Years Later: A Report to the Los Angeles Police Commission on the Los Angeles Police Department's Implementation of Independent Commission Recommendations*, Los Angeles Police Commission, Los Angeles.
- DuBay, D.K. 1995, *Oleoresin Capsicum Spray and Pepper Sprays*, Law and Order, April.
- Edwards, S.M., Granfield, J. & Onnen, J. 1997, *Evaluation of Pepper Spray*, National Institute of Justice: Research in Brief, Washington, DC, March.
- (IACP) International Association of Chiefs of Police 1995, *Pepper Spray Evaluation Project*, US Department of Justice, Washington, DC.
- Kaminski, R.J., Edwards, S.M. & Johnson, J.W. 1998, *The Deterrent Effects of Oleoresin Capsicum on Assaults Against Police: Testing the Velcro-Effect Hypothesis*, National Institute of Justice, Washington DC (unpublished conference paper).
- Kaminski, R.J., Edwards, S.M. & Johnson, J.W. 1999, *Assessing the Incapacitative Effects of Pepper Spray During Resistive Encounters with the Police*, Policing: An International Journal of Police Strategies & Management, vol. 22, no. 1.
- Kleinig, J. 1996, *The Ethics of Policing*, Cambridge University Press, Cambridge.
- Lumb, R.C. & Friday, P.C. 1997, *Impact of Pepper Spray Availability on Police Officer Use of Force Decisions* Policing: An International Journal of Police Strategies & Management, vol. 20, no. 1.
- (MCAJ) Ministerial Council on the Administration of Justice Secretariat 1998, *Notice of Amendment to Resolution of the 34th Meeting of the Australasian Police Ministers' Council* (unpublished notice of 1 December).
- Morabito, E.V. & Doerner, W.G. 1997, *Police Use of Less-Than-Lethal Force: Oleoresin Capsicum (OC) Spray*, Policing: An International Journal of Police Strategies & Management, vol. 20, no. 4.
- Nowicki, E. 1994, *Facts about OC Sprays*, Law Enforcement Technology, May.
- (NPRU) National Police Research Unit 1998, *National Minimum Guidelines for Incident Management, Conflict and Use of Force*, NPRU, Payneham.
- (QPS) Queensland Police Service, *Operational Procedures Manual*.
- Queensland Police Service 1996, *Project Lighthouse: The Final Report by the Commissioner's Inspectorate on Matters Pertaining to the Use of Force*, QPS, Brisbane.
- Ranson, D. 1994, *Oleoresin Capsicum Spray in the Control of Violence*, Journal of Law and Medicine, vol. 2, no. 1.
- (RACAP) QPS & CJC 1998, *Final Report of the Joint Working Group for the Reduction of Assault Complaints Against Police* (unpub., September).
- Truncale, J. & Messina, P. 1994, *Pepper Sprays: Hot Stuff or Hotly Questionable?*, Law Enforcement Technology, January.

---

United Nations 1992, *Compendium of United Nations Standards and Norms in Crime Prevention and Criminal Justice: The Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders*, United Nations, New York.

Victoria Police 1996, *Project Beacon: a Synopsis*, Victoria Police, Melbourne.

Weaver, W. & Jett, M. 1989, *Oleoresin Capsicum Training and Use*, Firearms Training Unit, FBI Academy, Quantico, Virginia.

**Legislation:**

*Criminal Code (Qld)*

*Police Service Administration Act 1990 (Qld)*

*Weapons Act 1990 (Qld)*

*Workplace Health and Safety Act 1995 (Qld)*