



Picture: PAPHotos

Less is

more

In October 2004 the Boston Red Sox won the baseball World Series. The victory was overshadowed by the death of Victoria Snelgrove, a 21-year-old college student, who was struck in the eye by a less lethal projectile fired by Boston police officers trying to quell disturbances following the home team's victory over the New York Yankees. The weapon system used, which contained OC (Oleoresin Capsicum), is described in the manufacturer's literature as providing a "low risk of permanent injury even at very close range."

Despite a closely fought presidential election the international media carried news of the tragedy. Issues of organisational policy, training, competency, equipment selection, operational procedures and accountability moved centre stage. Operational commanders were named, their photograph carried in national papers and the international media asked the Boston Police Commissioner, Kathleen O'Toole for

Less lethal weapons provide forces with more options when faced with a violent threat but all officers must understand the limitations of the technology, warns Colin Burrows.

her response.

A few days later a Coroner's jury in London returned a verdict of unlawful killing following the fatal shooting of Harry Stanley by Metropolitan Police Officers. Mr Stanley had been shot following a report of a man carrying what was believed to be a sawn-off shotgun wrapped in a plastic bag. Details of the inquest verdict were also reported in the international media.

Both of the above incidents were tragedies, primarily for the family and friends of the individuals killed, but also for the officers involved and the respective and wider law enforcement communities.

Both involved critical interventions by

police officers in human affairs. Tactical decisions and judgments were made, not in the cool analytical atmosphere of the courtroom, but in highly pressured operational situations.

The media often refers to 'non lethal' weapons in relation to policing operations but the term is a misnomer. Every use of force has lethal potential and the concept of 'less lethal' should not ordinarily be separated from firearms and other tactical options. For the most part these are not 'either-or' approaches, but tactical options based on the capabilities that are immediately available to officers at the scene of a rapidly evolving incident.

In these situations what is being

considered is a spectrum of intervention in critical and often potentially life-threatening situations in which policies, systems, tactics, technologies and training provide a potential to reduce the probability of lethal outcomes. In the most critical of situations, this may result in conventional firearms and less lethal weapons being brought to bear simultaneously at the same incident. Irrespective of the weapons used, the intention is to stop the threat.

In all of this, it is important to realise that the physical presence of a police officer significantly and immediately alters the dynamics of the encounter, the actions of the participants, the assessments of the officers and critical actions taken by them.

Policy, training, equipment and the tactical options immediately available also influence those dynamics. Failure to provide an officer with appropriate less lethal weapons effectively restricts their tactical options and increases the potential of lethal outcomes. Similarly, providing a less lethal technology in the absence of appropriate equipment selection, testing, medical evaluation, operational policy, training and guidance, also increases that risk.

The UK police service has for many years had access to what are now referred to as less lethal technologies. For the most part these were developed separately by different ACPO sub committees with responsibility for firearms, public order policing and officer safety. More often than not reviews and initiatives were implemented after tragedies or where incidents were perceived to have gone badly wrong.

Yet, prior to February 2002, baton rounds had never been fired operationally outside of Northern Ireland and CS had only been used once in a public order situation. Effectively, firearms officers had only conventional firearms available to them when confronting an armed or otherwise dangerous individual. With the exception of CS projectiles, less lethal technologies available in these situations were in the main designed to disorientate and provide officers with tactical advantage.

By the end of the 1990s duty of care, health and safety and impending human rights legislation brought the whole issue of taking positive action to ensure a safe working environment and uphold the right to life, into sharp focus.

In 2003 the Police Complaints Authority concluded their report on Police Use of Firearms by stating that:

"...the development of less lethal options – including both the application of existing tactical options such as negotiators and police dogs and the

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The development of the technology in respect of a less lethal capability for the police is ongoing.

development of new technologies – must be addressed with the utmost urgency to ensure that the police response is consistent with the requirements of human rights legislation."

By this time such research was well under way. In June 2000, following publication of the International Commission on Policing in Northern Ireland chaired by Chris Patten, the Secretary of State for Northern Ireland established a UK-wide Steering Group to lead a major research programme into less lethal technologies.

The programme was specifically designed to find an acceptable, effective and potentially less lethal alternative to the existing baton round, and to broaden the public order equipment to expand the range of tactical options available to operational commanders. Whilst initially established to address a Northern Ireland issue, the steering group quickly adopted a UK wide perspective.

Its work entailed a world-wide search for the 'less lethal' alternatives, as well as commissioning technical research to develop new technologies. Central to the approach has been:

- The development of a written operational requirement for less lethal technologies endorsed by ACPO.
- International literature review of all commercially available or near market-ready technologies by the Police Scientific Development Branch.
- Technical comparison and testing of technologies against the operational requirements by PSDB and the Defence Science and Technology Laboratories.
- Drafting of ACPO guidance on the operational use of candidate technologies.
- Independent medical assessment of technologies by the Defence Science Advisory Council Sub-committee on the Medical Implications of Less Lethal

Weapons (DOMILL) with specific reference to the draft ACPO guidance.

- Publication of the independent medical assessment and finalised ACPO guidance, which are before Parliament.
- Development of post use review procedures for new technologies.

The work of the group, which is still ongoing, has resulted in the introduction of a broader range of technologies, including the replacement L21 baton round systems which have been described by an international group of experts as the benchmark for accuracy and consistency in kinetic energy projectiles. In addition, Taser technology has been made available for specialist firearms officers in England and Wales. The availability of incapacitant sprays has been extended to PSNI officers. PSNI now also has water cannon available as crowd dispersal technology. The use of each of the current technologies has been developed on a UK wide basis and is governed by ACPO guidance, as will be any new technologies.

Since the introduction of the L21 baton round as a less lethal option in non-public order situations, firearms officers have used it in more than 30 incidents in England and Wales. Taser has been deployed in more than 80 incidents. It is not possible to speculate how often the use of these technologies has deferred the discharge of conventional firearms but their availability has undoubtedly saved lives. In Northern Ireland the increased availability of a broader range of equipment, coupled with a reduction in organised violence, has resulted in a situation where no baton rounds have been fired since September 2002.

Each of these technologies has limitations in respect of range, effect and the types of incident for which it is suited. With the exception of Tasers which have a maximum range of 21 feet, the majority of less lethal technologies have not been





Picture: PAMphotos

The intention is not to fully incapacitate but to impede, dissuade or reduce a threat.

designed, nor can be depended upon, to fully incapacitate. They may however impede, dissuade or reduce a person's ability to pose a threat and in doing so provide officers with a tactical advantage.

All of the work undertaken by the Steering Group has been documented and there have been four published reports, all of which are in the public domain and available on the Northern Ireland Office Web site (see www.nio.gov.uk/pdf/batonrep2004.pdf). In addition there have been published reports by the Police Scientific Development Branch that can be accessed on: www.homeoffice.gov.uk/docs/lesslethal.pdf. Work is ongoing in respect of two potential alternatives to the current baton round system. These include an attenuating energy projectile designed to reduce the probability of a serious injury should a strike occur to the head area, and a discriminating irritant projectile designed to be used at extended range.

Central to the Steering Group's work has been the development of strong international links. In particular, it has supported the development of the International Law Enforcement Forum (ILEF) on Minimal Force Options and less lethal technologies. As with the work of the steering group the ILEF reports have been openly published and can be found on www.nldt.org/documents/2004_ilef_report.pdf.

ILEF provides the opportunity for professional discussion by practitioners on

the development of new concepts, operational analysis and operational requirements. The work of the UK Steering Group and of ILEF has been underpinned by United Nations Basic Principles on the Use of Force and Firearms. Article 2 requires that:

"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."

The implications of Article 2 is that the development of differentiated means of the use of force and firearms is the responsibility, not simply of interested and motivated tactical practitioners within individual police forces, but also of central government and chief officers.

Within England and Wales the Home Office has developed a code of practice on the use of firearms and less lethal weapons. This code has reflected many of the procedures developed by the UK Steering Group. The statutory base for the code is the Police Reform Act 2002. The code applies to any firearms and less lethal weapons available for issue within police forces, on the authority of a senior officer. The code specifies that, in order to reduce the risk of death or serious injury, the equipment available to police forces should include less lethal weapons and munitions.

This is important as it recognises that less lethal weapons and munitions minimise (as oppose to eliminate) the risk of death or serious injury. Whilst there are a number of definitions of 'less lethal,' the one I believe

to ensure that they are equipped for those responsibilities.

Less lethal technologies do not obviate the need for conventional firearms. Nor, as the Boston Police Department are only too well aware, are the use of less lethal technologies always non lethal. As with any use of force there is the potential for fatalities – either as a direct or secondary effect.

Of particular concern is that stopping a highly motivated or emotionally aroused individual without interfering with their blood supply or central nervous system is exceptionally difficult. When high motivation or emotional arousal is combined with alcohol or drugs, pain thresholds are significantly altered and the probability of outcome becomes difficult to predict.

Despite the fact that there are no risk free or 100 per cent safe or effective weapon systems, properly assessed less lethal technologies do provide officers with a spectrum of options, which if used in accordance with properly written guidance and effective training, is less likely to result in death or serious injury than conventional firearms.

Policy, training and selection must be underpinned by rigorous scientific and medical assessment. Chief officers, operational commanders and those who review operational incidents must first understand the operational limitations of technologies and the likely outcomes of use. Equally officers who are required to place themselves into life threatening encounters need to be trained and empowered to make operational decisions

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provides the best working definition was developed within the ILEF meeting held at Penn State University in 2003:

"The use of technologies, weapons and tactics, which are less likely to result in death or serious injury than conventional firearms".

It is important to note that the Code extends beyond those police officers who may be called upon to use "weapons requiring special authorisation", to include those who command such officers, those providing tactical advice in their use, and who authorise the issue and deployment of such weapons. The Code requires that they should be selected, trained and have their competence assessed and maintained

in the presence of the uplifted knife or pointed gun, and they must not be encumbered with a bewildering array of belt-carried accoutrements to choose from. Whilst the UK approach to the development of less lethal options is increasingly being recognised internationally as being at the leading edge, there is still much to be done in educating police professionals, the legal establishment and the public of both the potential and the limitations.

Colin Burrows QPM, is an independent consultant specialising in critical intervention and specialist adviser to ACPO.



Shock tactics

The police service should be careful not to alienate public opinion by allowing less lethal weapons to be used as instruments to gain compliance, argues Brian Rappert.

The appropriateness of the use of force by the police in democratic societies often generates significant debate. Deaths and injuries can lead to prolonged legal disputes that undermine public confidence and are often financially and emotionally shattering.

To help resolve conflict situations, almost all police forces around the world deploy less lethal weapons. The impetus for much of the renewed focus in Britain dates back to 2001 with the high profile police shootings of Derek Bennett who was pointing an imitation gun at officers in Brixton, south London and Andrew Kernan, a schizophrenia sufferer who was wielding a samurai sword in Liverpool.

As Colin Burrows suggests in the article opposite, there are a variety of less lethal weapons currently on the market, but there is good justification for remaining sceptical about all their advertised benefits. If you look beyond the broad promises about the potential to save lives and concentrate on how they are likely to be deployed, a number of pressing issues arise.

Although much of the discussion about less lethal weapons focuses on their potential to reduce deaths from police shootings, the most frequent uses of such options are likely to be as other forms of force that do not involve firearms. A good illustration of this is the M26 Taser. Although this device is only authorised for firearms officers in England and Wales, the ACPO operational guidelines explicitly state it is not a replacement for conventional firearms. While one might expect the Taser to have helped in the case of Andrew Kernan (although the CS spray used did not) it would have been unlikely to figure in the response to Derek Bennett.

As such, assessing the advantages and disadvantages of the Taser, as with many other less lethal weapons, requires comparing them to other options. There are difficult choices at stake here about how to

weigh the risks to officers, recipients, and bystanders. For instance, some US forces issue Tasers to all street officers and place it rather low on their 'force continuums', effectively making it available as a device to gain compliance. This is not an unexpected practice - the manufacturer advocates its early and aggressive use to prevent any escalation and in a 2002 European training session proposed the Taser is good against demonstrators such as "tree huggers" and those shouting "hell no, we won't go".

Although the Taser is only authorised for firearms officers in England and Wales, nothing stops its use as a compliance instrument here. While the early discharge of a five second 25-watt shock to gain obedience might reduce the potential for officer injury, it is not clear this represents exemplar police practice.

Using another example, although the L104 Baton Gun has been largely employed in extreme situations in England and Wales as an option short of firearms, in Northern Ireland it has been used in a much wider range of public order situations and the necessity of its use has received significant opposition as a result.

While the UN Basic Principles on the Use of Force and Firearms call for the development and deployment of non-lethal weapons, it also requires them to be 'carefully controlled' and 'carefully evaluated'. Unfortunately, the history of practice in the UK on such matters is not reassuring. During their introduction and subsequent use in Northern Ireland, for instance, rubber bullets, baton rounds and tear gas were all said to be subject to strict

controls, statements that later proved to be of dubious worth. No doubt much of the antagonism in Northern Ireland directed at current attempts to modify the baton gun stems from such a history.

More recently, when CS spray was introduced in the UK in the late 1990s the product was said by the Home Office to be tested to the level required of a pharmaceutical drug. Although the basis for such statements has never been publicly set out, work carried out by myself and others to unearth the true level of testing has indicated that this claim is highly dubious. Since its introduction, highly selective evidence has been cited to suggest CS spray has reduced officer injuries while much stronger Home Office evidence to the contrary has been disregarded. Similarly, insufficient attention has been given to the institutional systems in place to monitor long-term health effects.

While the recent UK Steering Group research programme has improved on past standards of transparency and testing, it has made use of many of the previous questionable claims and its overall level is still insufficient. Key safety and effectiveness claims take the form of highly summarised conclusions without substantiating evidence.

Police forces searching for ways to reduce injuries to officers and the public with

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limited resources at their disposal face difficult questions about which policies to pursue. It should always be kept in mind that at the centre of good policing are professional, well trained officers. One key in reducing injuries is establishing rigorous procedures to monitor police use of force and associated injuries so as identify the situations of risk and to adopt appropriate, evidence-based training, tactics and technology. New weapons might be a part of any such approach, but they can hardly be a substitute for it.

*Brian Rappert is a Lecturer in the Department of Sociology, University of Exeter and author of *Non-Lethal Weapons as Legitimising Forces? For further analyses of less-lethal weapons see www.ex.ac.uk/~br201/**